

66202 U.S. PTO  
06/18/97

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A/No fee  
61980 U.S. PTO  
08/878356  
06/18/97

June 18, 1997

Commissioner of Patents  
Washington, DC 20231

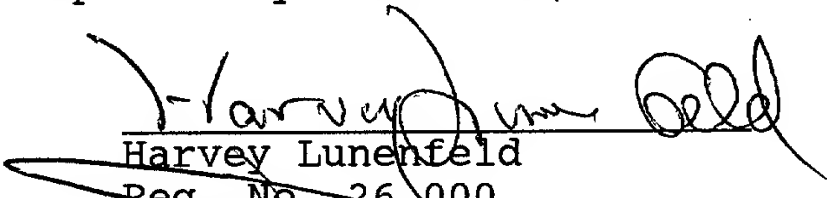
APPLICANT: Anthony Puma, Erwin Teltscher and  
John Mizzi

TITLE: APPARATUS FOR DETERMINING  
PERFORMANCE-INDICATING NUMBERS  
IN SPORTS GAMES, PARTICULARLY IN  
ICE HOCKEY

Dear Sir:

Enclosed please find Request For Continuation-in-Part  
application under Rule 60, preliminary amendment including 5  
sheets of drawings therein, copies of prior application and  
prior declaration, new declaration, new small entity  
statement and certificate of mailing by Express Mail.

Kindly acknowledge receipt by returning the enclosed  
postcard. Respectfully submitted,

  
Harvey Lunenfeld  
Reg. No. 26,000  
Registered Patent Agent

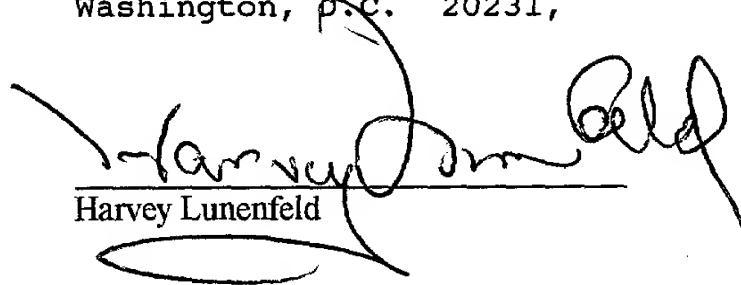
CERTIFICATE OF MAILING

I hereby certify that the attached correspondence is being  
deposited with the United States Postal Service as Express Mail No. *EM370717096us*  
addressed to:

Commissioner of Patents

Washington, D.C. 20231,

on June 18, 1997

  
Harvey Lunenfeld

pat60

06/18/97 09:13:57

DECLARATION FOR PATENT APPLICATION CO-PENDING APPLICATION  
CONTAINING ADDITIONAL SUBJECT MATTER

As a below named inventor, we hereby declare that our residence, post office address and citizenship are as stated below next to our name; we believe that we are the original, first and sole inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled:

APPARATUS FOR DETERMINING PERFORMANCE-INDICATING NUMBERS IN SPORTS GAMES, PARTICULARLY IN ICE HOCKEY,

the specification of which is being filed herein.

This application in part discloses and claims subject matter disclosed in my earlier filed patent applications, Serial No. 08/664,406, filed June 17, 1996, now pending, Serial No. 08/116,249, filed on Sept. 2, 1993, now U.S. patent no. 5,537,033 and 07/579,410 filed on Sept. 7, 1990, now abandoned.

We hereby state that we have reviewed and understand the contents of the above-identified specification, including the claims, referred to above. We acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, Sec. 1.56(a). We hereby claim foreign priority benefits under Title 35, United States Code, Sec. 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)	Priority Claimed
(Number) (Country) (Day/Month/Year Filed)	(Yes) (No)

None

We hereby claim the benefit under Title 35, United States Code, Sec. 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code Sec. 112. I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, Sec. 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application.

(Application Serial No.)	(Filing Date)	(Status-Patented, Pend, Aban)
08/664,406,	June 17, 1996	pending,

08/116,249

Sept. 2, 1993

patented (USPN 5,537,033)

07/579,410

Sept. 7, 1990

abandoned

We hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

POWER OF AGENT/ATTORNEY: We hereby appoint as our agent/attorney, with full powers of substitution and revocation, to prosecute this application and transact all business in the Patent and Trademark Office connected therewith:

HARVEY LUNENFELD Reg. No. 26,000

ALFRED MOORE WALKER Reg. No. 29,983

Send correspondence to:

HARVEY LUNENFELD  
8 Patrician Dr.  
East Northport, NY 11731  
(516) 754-1000

FULL NAME OF CO-INVENTOR:

Anthony Puma

Citizenship:

USA

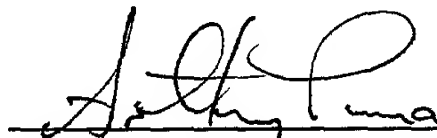
Residence Address:

38 Kale Road  
Rocky Point, NY 11778

Post Office Address:

P.O. Box 116  
Rocky Point, NY 11778

DATE: June 18, 1997

  
\_\_\_\_\_  
Anthony Puma



FULL NAME OF CO-INVENTOR:

Erwin Teltscher

Citizenship:

USA

Residence Address:

69 Diana's Trail  
Roslyn, NY 11576

Post Office Address:

PO Box 266  
Roslyn, NY 11576

DATE: June , 1997

\_\_\_\_\_  
Erwin Teltscher

FULL NAME OF CO INVENTOR:

John Mizzi

Citizenship:

USA

Residence Address:

30 Cramer Road  
Poughkeepsie, NY 12603

Post Office Address:

Same

DATE: June , 1997

\_\_\_\_\_  
John Mizzi

declar-cip-joint

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Anthony Puma, Erwin Teltscher and  
John Mizzi

TITLE: APPARATUS FOR DETERMINING  
PERFORMANCE-INDICATING NUMBERS  
IN SPORTS GAMES, PARTICULARLY IN  
ICE HOCKEY

PRIOR APPLICATION

SERIAL NUMBER: 08/664,406

FILED: June 17, 1996

GROUP ART UNIT: 3304

EXAMINER: Mark Graham

REQUEST FOR CONTINUATION-IN-PART APPLICATION  
UNDER 37 C.F.R. 1.60

Hon. Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Dear Sir:

This is a request for filing a continuation-in-part application under 37 C.F.R. 1.60 of pending prior application Serial Number 08/664,406, filed on June 1 1996 , entitled APPARATUS FOR DETERMINING PERFORMANCE-INDICATING NUMBERS IN SPORTS GAMES, PARTICULARLY IN ICE HOCKEY

by the following named inventors:

Anthony Puma, 38 Kale Road, Rocky Point, NY 11778,  
Erwin Teltscher, 69 Diana's Trail, Roslyn, NY 11576 and  
John Mizzi, 30 Cramer Rd., Poughkeepsie, NY 12603, all  
citizens of the United States of America

No payment of the Issue Fee, abandonment of, or  
termination of proceedings has occurred in the above  
entitled prior application. The prior application is not  
being abandoned.

1. A preliminary amendment is enclosed.

2. The filing fee is calculated on the basis of the claims existing in the prior application, as amended by the foregoing referenced preliminary amendment:

Total Claims: 4

Independent Claims: 2

The filing fee for the continuation application is \$ 385 for the base filing fee and \$ 0 for no independent claims in excess of three, for a total of \$ 385.

3. Please amend the Specification by inserting before line 1 (after the title of the invention), at page 1, the sentence:

--This application is a continuation-in-part of application Serial No. 08/664,406, filed June 17, 1996, which is a continuation of application serial no. 08/116,249 filed Sept. 2, 1993, now United States patent no. 5,537,033, which is further a continuation-in-part of application serial no. 07/579,410 filed Sept. 7, 1990, now abandoned.

4. The power of attorney in the prior application is to:

Harvey Lunenfeld, Reg. No. 26,000  
8 Patrician Dr.  
East Northport, NY 117318  
Tel: 516-754-1000  
Fax: 516-757-7575

5. A true copy of the prior application, including the drawings and declaration, as filed, is enclosed.

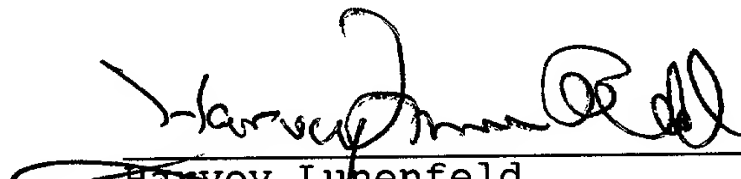
6. A verified statement to establish small entity status under 37 CFR 1.9 and 37 CFR 1.27 was filed in the prior application and such status is still proper and desired.

7. The undersigned states that the enclosed application papers comprise a true copy of the prior application as filed.

8. A new oath and declaration is included since this application is a continuation-in-part which discloses and claims additional subject matter.

Respectfully submitted,

Dated: June 18, 1997

  
Harvey Lunenfeld  
Reg. No. 26,000  
Registered Patent Agent

8 Patricia Dr.  
East Northport, NY 11731  
(516) 754-1000

CERTIFICATE OF MAILING

I hereby certify that the attached correspondence is being deposited with the United States Postal Service as Express Mail No. **EM37071709642** addressed to:

Commissioner of Patents

Washington, D.C. 20231,

on June 18, ~~1996~~ 1997

pat60

Harvey Lupenfeld

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APPLICANTS: Anthony Puma, Erwin Teltscher and  
John Mizzi

SERIAL NO.: To be assigned

FILED OR ISSUED: To be assigned

FOR: APPARATUS FOR DETERMINING  
PERFORMANCE-INDICATING NUMBERS IN  
SPORTS GAMES, PARTICULARLY IN ICE  
HOCKEY

**VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY  
STATUS (37 CFR 1.9(f) AND 1.27(b)) INDEPENDENT INVENTOR**

As a below named inventors, we hereby declare that we  
qualify as independent inventors as defined in 37 CFR 1.9(c)  
for purposes of paying reduced fees under Section 41(a) and  
(b) of Title 35, United States Code, to the Patent and  
Trademark Office with regard to the invention entitled

APPARATUS FOR DETERMINING  
PERFORMANCE-INDICATING NUMBERS IN  
SPORTS GAMES, PARTICULARLY IN ICE  
HOCKEY

described in the specification filed herewith.

We have not assigned, granted, conveyed or licensed and are  
under no obligation under contract or law to assign, grant,  
convey or license, any rights in the invention to any person  
who could not be classified as an independent inventor under  
37 CFR 1.9(c) if that person had made the invention, or to  
any concern which would not qualify as a small business  
concern under 37 CFR 1.9(d) or a nonprofit organization  
under 37 CFR 1.9(e).

Each person, concern or organization to which we have  
assigned, granted, conveyed, or licensed or are under an  
obligation under contract or law to assign, grant, convey,  
or license any rights in the invention is listed below:

FULL NAME:

ADDRESS:

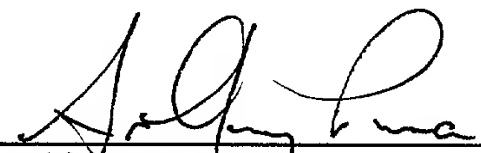
(INDIVIDUAL) (SMALL BUSINESS CONCERN) (NON-PROFIT ORGANIZ.)

NONE

We acknowledge the duty to file, in this application or patent, notification of any change in status resulting in the loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b)).

We hereby declare that all statements made herein on our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

DATE: June 18 , 1997

  
\_\_\_\_\_  
Anthony Puma

DATE: June , 1997

\_\_\_\_\_  
Erwin Teltscher

DATE: June , 1997

\_\_\_\_\_  
John Mizzi

vstmtJOINT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

5 APPLICANTS: Anthony Puma, Erwin Teltscher and  
John Mizzi

TITLE: APPARATUS FOR DETERMINING PERFORMANCE-  
INDICATING NUMBERS IN SPORTS GAMES,  
10 PARTICULARLY IN ICE HOCKEY

SERIAL NO.: to be assigned

FILED: to be assigned

15 GROUP ART UNIT: to be assigned

EXAMINER: to be assigned

Prior Application:

20 APPLICANTS: Anthony Puma, Erwin Teltscher and  
John Mizzi

25 TITLE: APPARATUS FOR DETERMINING PERFORMANCE-  
INDICATING NUMBERS IN SPORTS GAMES,  
PARTICULARLY IN ICE HOCKEY

SERIAL NO.: 08/664,406

30 FILED: 06/17/96

GROUP ART UNIT: 3304

35 EXAMINER: Mark Graham

PRELIMINARY AMENDMENT

40 Hon. Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Dear Sir:

Prior to an examination on the merits of the above  
45 entitled application, please amend the application as  
follows:



IN THE ABSTRACT:

Cancel the present Abstract and add as follows:

5       --An apparatus for determining performance-indicating  
numbers in sports games, particularly in ice hockey,  
includes a database having sports games box scores stored  
therein. The database is stored in a tangible electronic  
media, such as magnetic media, optical media, electronic  
10 media, paper, thermosetting polymers, rubber, metals, or  
other suitable storage media. Such media includes computer  
diskettes, magnetic tape, optical disks, random access  
memory, read only memory, computer punch cards, and other  
volatile, temporary, and/or permanent memory devices. The  
15 database scores box scores, such as start time, stop time,  
team 1 goals and time of goals, team 1 goalies A and B goals  
and power plays, and team 2 goalies A and B goals and power  
plays. The performance indicating statistics can be  
electronically displayed after a game or during a game on  
20 the aforesaid tangible media, which may include among  
others, a video split screen display during the course of a  
game, a sports arena electronic scoreboard, or on any other  
video display, such as a global communications network or a  
television show.--

25

IN THE SPECIFICATION:

Please amend the Specification as follows:

30       On page 10, line 2, after ``ACCORDING TO'' please  
insert:

--ONE EMBODIMENT OF --.

On page 20, after line 15, please add the following:

5       --BASIS FOR THE INTERMEDIATE FORMULAE IN ANOTHER  
PREFERRED EMBODIMENT ACCORDING TO THE INVENTION:

10       The aforementioned formulae are illustrative of one  
embodiment of the present invention. For example, the number  
"60.6" in the formulae includes the sum of 60 plus 0.6,  
which yields 60.6, to compensate for precision of certain  
calculators and computers for what is in actuality a factor  
of "60". In other calculators and/or computers 60.5  
could be used as a means for compensating for inaccuracies  
15 and precision of such calculators, for example. However, if  
precision is not an issue with respect to accuracy, and the  
calculator and/or computer is substantially 100 per cent  
precise and substantially 100 percent accurate, then a  
factor of 60 is used.

20

TYPICAL HOCKEY GAME

25

Furthermore, in a further preferred embodiment, the user may  
start with a typical ice hockey game as follows:

30

❖ 1) Game clock 0:00 - 1:24: A goal was scored by Team #2 at  
1:24.

❖ No players were serving penalty time when the goal was  
scored.

❖ FORMULA #10, EARNED GOAL AVERAGE:  $((R) - (S) / (Q) - (T) * (60))$

❖ TEAM #1:

5

❖ R (total goals against) 1, minus S, ( power play goals against) zero for a sum

❖ of 1. Divide by Q minus T (Q being total minutes played  
10 by a goaltender)

❖ 1, (T being total power play time faced by a goaltender)  
0 minutes for

15 ❖ a total of 1. The 1 goal allowed minus the 0 power play goal divided by

❖ 1 minute equals 1.00 parts of an earned goal per minute of even strength

20

❖ time. Multiply times 60, the standard amount of time in a hockey game. The

❖ total of 60.00 is the current amount of even strength  
25 goals allowed per

❖ every 60 minutes of even strength time faced by Team #1  
goaltender

❖ identified as #31 in this game.

5

❖2) 1:24 - 2:23: A 2 minute penalty was assessed to Team #1,

❖ giving Team #2 a power play advantage beginning at 2:23.

10 ❖3) 2:23 - 5:06: A goal was scored by Team #2 at 5:06 but  
not

❖ within the allotted 2 minute power play time, thus Team  
#2 is charged zero

15

❖ power play goals for 2 minutes of 1 player and composite  
power play time.

❖ Team #1 is credited with zero power play goals against  
20 for 2 minutes of penalty

❖ time against in 1 player and composite penalty  
efficiency.

25 ❖

❖ FORMULA #1, COMPOSITE POWER PLAY:

$((D) + (2 * G) * (60) + (E) + (2 * H) / (B) / (60) \text{INT} * (60.6))$

❖ TEAM #2:

5

❖ Add D, (accrued number of minutes, in which a team has a one player advantage)

❖ D being 1 minutes, to two times G (accrued number of  
10 minutes in which a team has a

❖ has a two player advantage) G being 0 times 2, added to 2 equals 2. Multiply this sum 2 by 60, thereby transposing all

15

❖ player advantage minutes into 120 seconds. Add the sum of 120 seconds to E,

❖ accrued number of seconds in which a team has a one  
20 player advantage) E being 0 seconds, total 120

❖ seconds, then add again to two times H (accrued number of seconds in which a team

25 ❖ has a two player advantage) 0 seconds times two equals 0 seconds, total is 120 seconds.

❖ Divide 120 seconds by B (total power play goals scored by a team) B being 1, the sum is 120.

❖ When B equals zero no average can be acquired and all  
5 time accrues.

❖ When B equals 1 divide again by 60 thereby transposing the seconds into minutes. The sum is 2:00. Whereby the

10 ❖ 2. represents whole total minutes and the fraction represents the integer, .0. The integer

❖ is multiplied by 60.6, the integer calculation producing the whole number 0.

15

❖ The integer being located the right of the whole number 2 would display in the

❖ following manner: 2:00 being TEAM #2 power play  
20 efficiency at this time of the game.

❖

❖ FORMULA #2, COMPOSITE PENALTY EFFICIENCY:

25  $((P) + (2 * S) * (60) + (Q) + (2 * T) / (N) / (60) \text{INT} * (60.6))$

❖ TEAM #2:

❖ Add P, (accrued number of minutes, in which a team has one player serving penalty time)

5 ❖ P being 2 minutes, to two times S (accrued number of minutes in which a team has two players serving penalty time)

❖ S being 0 times 60, added to 2 equals 2. Multiply this  
10 sum 2 by 60, thereby transposing all

❖ penalty minutes into 120 seconds. Add the sum of 120 seconds to Q, accrued number of seconds in which

15 ❖ a team has one player serving penalty time) Q being 0 seconds, total 120.

❖ Add to two times T (accrued number of seconds in which a team  
20

❖ has two players serving penalty time) T being 0 seconds times two equals 0 seconds

❖ the total is 120 seconds. Divide 120 seconds by N (total  
25 power play goals scored against a team) N being 0.

❖ When N equals 0 no average can be acquired and all penalty time accrues.

❖ When N equals 1 divide by 60 thereby transposing the  
5 seconds into minutes. The sum is 2.00 whereby the

❖ 2 represents whole total minutes and the fraction represents the integer, .00.

10 ❖ The integer is multiplied by 60.6, the integer calculation producing the whole number 2.

❖ The integer being located to the right of the whole number 2 would display in the

15

❖ following manner: 2:00 being TEAM #2 penalty efficiency at this time of the game.

❖

20

❖ FORMULA #7, COMPOSITE HOT SEAT:

$((P) + (2 * S) * (60) + (Q) + (2 * T) / (N) / (60) \text{INT} * (60.6))$

❖ TEAM #1:

25

❖ Add P, (accrued number of minutes, in which a team has one player serving penalty time)



❖ P being 2 minutes, to two times S (accrued number of minutes in which a team has two players serving penalty time)

5

❖ S being 0 times 0, added to 2 equals 2. Multiply this sum 2 by 60, thereby transposing all

❖ penalty minutes into 120 seconds. Add the sum of 120 seconds to Q, accrued number of seconds in which

❖ a team has one player serving penalty time) Q being 0 seconds, total 120.

15 ❖ Add to two times T (accrued number of seconds in which a team

❖ has two players serving penalty time) T being 0 seconds times two equals 0 seconds

20

❖ the total is 120 seconds. Divide 120 seconds by N (total power play goals scored against a team) N being 0.

❖ When N equals 0 no average can be acquired and all  
25 penalty time accrues.

❖ When N equals 1 divide by 60 thereby transposing the seconds into minutes. The sum is 2.00 whereby the

❖ 2 represents whole total minutes and the fraction  
5 represents the integer, .00.

❖ The integer is multiplied by 60.6, the integer calculation producing the whole number 2.

10 ❖ The integer being located the right of the whole number 2 would display in the

❖ following manner: 2:00 being TEAM #2 Composite Hot Seat at this time of the game.

15

❖4) 5:06 - 5:39: At 5:39 a 2 minute penalty was

❖ assessed to Team #2, thus giving Team #1 a power play beginning at 5:39.

20

❖5) 5:39 - 11:56: A 2 minute penalty was assessed to Team #1 at 11:56

❖ Team #1 did not score a power play goal within the  
25 allotted 2 minute power

❖ play time that started at 5:39. Team #1 is charged zero power play goals

❖ for 2 minutes of 1 player and composite power play time.

5

❖ Team #2 is credited with zero goals against for 2 minutes of 1 player

❖ and composite penalty time against. Penalty to Team #1  
10 begins at 11:56.

❖6) 11:56 - 14:27: A 2 minute penalty was assessed to Team #2 at 14:27 giving Team #1 a power play. Team #2 did not score a power play goal within the allotted 2 minute power  
15 play time that started at 11:56. Team #2 is charged zero power

❖ play goals for 2 minutes of 1 player and composite power play time.

20

❖ Team #1 is credited with zero goals against for 2 minutes of 1 player

❖ and composite penalty time against. Penalty to Team #1  
25 begins at 14:27.

7) 14:27 - 15:08: A goal was scored by Team #2 at 15:08.

Team #1

power play is charged zero power play goals for 41  
5 seconds of 1 player and

composite power play time. Team #2 is credited with zero  
goals and

10 41 seconds of 1 player and composite penalty efficiency  
time.

8) 15:08 - 16:05: A 2 minute penalty was assessed at 16:05

15 against Team #2 when 1 player was already serving  
penalty time.

Team #1 is charged zero goals and 57 seconds in 1 player

20 and composite power play time. Team #2 is charged zero  
goals and 57 seconds

in 1 player and composite power play time against. A two  
player

25

advantage for 22 seconds begins at 16:05 for Team #1.

❖ 9) 16:05 - 17:25: A 2 minute penalty was assessed to Team  
#1 during

❖ a power play. Team #1 expired the 22 seconds of two  
5 player

❖ advantage at 16:27 without scoring and continued on a 1  
player advantage

10 ❖ from 16:27 to 17:25 for an additional 58 seconds of 1  
player power play time.

❖ Team #1 is charged zero power play goals for 22 seconds  
of 2 player

15 ❖ advantage time, zero goals for 58 seconds of 1 player  
advantage time

❖ and zero goals for 1 minute and 42 seconds of composite

20 power play

❖ time. Team #2 is credited with zero for 22 seconds of 2  
player power

25 ❖ play time against, zero goals for 58 seconds of 1 player  
advantage

❖ and zero goals for 1 minute and 42 seconds of composite penalty

❖ efficiency. When play resumed at 17:25 both teams had 1  
5 player serving

❖ penalty time.

❖

10

❖ FORMULA #3, TWO PLAYER POWER PLAY:

$((G) * (60) + (H) / (F) / (60) \text{INT} * (60.6))$

❖ TEAM #1:

15

❖ Multiply times 60 G (accrued number of minutes in which  
a team has a two

❖ player advantage) 0. Add to H (accrued number of seconds  
20 in which a team

❖ has a two player advantage) 22. Total is 22 seconds.  
Divide by F (number

25 ❖ of goals scored by a team when it has a two player  
advantage) 0.

❖ When F equals 0 indicating no two player power play goals scored for

❖ no average can be acquired and all time accrues. When F  
5 equals 1

❖ divide sum by 60 and multiply the integer by 60.6.

❖ The integer being located the right of the whole number  
10 0

❖ would display in the following manner: 0:22 being TEAM  
#1 two player

15 ❖ power play for this game.

❖

❖ FORMULA #8, HOT SEAT TWO PLAYER PENALTY DISADVANTAGE:  
20  $((S) * (60) + (T) / (R) / (60) \text{INT} * (60.6))$

❖ TEAM #2

❖ Multiply times 60 S (accrued number of minutes in which  
25 a team has two

❖ players serving penalty time) S being 0 time 60 equals 0  
seconds. Add to T

❖ (accrued number of seconds in which a team has two  
5 players serving penalty

❖ time. T being 22, total seconds is 22. Divide by R  
(number of goals scored

10 ❖ against a team when two players are serving penalty  
time, R being 0.

❖ When R equals 0 indicating no two player power play  
goals scored against

15 ❖ a goaltender no average can be acquired and all time  
accrues. When R

❖ equals 1 divide by 60, multiply the integer by 60.6.

20 ❖ It would display in the following manner: 0:22 being  
TEAM #2 goaltender

❖ Hot Seat two player penalty efficiency for this game.

25

❖ 10) 17:25 - 20:00: The period ended at 20:00. At 18:05



❖ Team #2 penalty expired. Team #2 had a 1 player  
advantage power play

❖ 18:05 to 19:25 and did not score a goal. Team #2 is  
5 charged zero goals

❖ for 1 minute and 20 seconds of 1 player power play. Team  
#1 was credited with zero goals for 1 minute and 20 seconds  
of penalty efficiency. End #1.

10

❖

❖PERIOD #2

15 ❖1) Game clock 0:00 to 1:01: A 2 minute penalty was assessed  
to Team #2, giving

❖ Team #1 a power play advantage beginning at 1:01.

20 ❖2) 1:01 - 4:57: A 2 minute penalty was assessed to Team #1  
and

❖ Team #2. No power play advantage. Team #1 did not score  
a

25

❖ power play goal within the allotted 2 minute power play  
time that started at

❖ 1:01. Team #1 is charged zero power play goals for two minutes of 1 player and composite

5 ❖ power play time. Team #2 is credited with zero goals against and two minutes of 1 player

❖ and composite penalty time against.

10 ❖3) 4:57 - 5:26: A goal is scored by Team #2. No players were

❖ serving penalty time when the goal was scored.

15 ❖4) 5:26 - 6:38: A goal is scored by Team #1. No players were

❖ serving penalty time when the goal was scored.

20 ❖5) 6:38 - 8:03: A 2 minute penalty was assessed to Team #1

❖ giving Team #2 a power play advantage beginning at 8:03.

❖6) 8:03 - 8:33: A 2 minute penalty is assessed to Team #2  
25 thereby

❖ nullifying their power play advantage that began at  
8:03.

❖ Team #2 is charged zero power play goals for 30 seconds  
5 of 1 player and

❖ composite power play time. Team #1 is credited with zero  
goals against

10 ❖ for 30 seconds of 1 player and composite penalty  
efficiency time against.

❖ Team #1 power play will begin at 10:03. Both teams now  
have 1 player serving  
15

❖ penalty time. (A delayed power play will begin for Team  
#1 at 10:03.

❖7) 8:33 - 12:12: A 2 minute penalty was assessed to Team #1  
20 and

❖ Team #2. No power play advantage. Team #1 did not score  
a power play goal

25 ❖ during a power play that began at 10:03. Team #1 is  
charged zero power play goals for 30 seconds of 1 player and  
composite power play time. Team #2 is credited with zero

goals against and 30 seconds of 1 player and composite  
penalty

❖ time against.

5

❖8) 12:12 - 13:15: A 2 minute penalty is assessed to Team #2  
giving

❖ Team #1 a power play advantage beginning at 13:15.

10

❖9) 13:15 - 19:13: A 2 minute penalty is assessed to Team #1  
giving

❖ Team #2 a power play advantage beginning at 19:13. Team  
15 #1 did not score a

❖ power play goal within the allotted 2 minute power play  
time that started at

20 ❖ 13:15. Team #1 is charged zero power play goals for two  
minutes of 1 player and composite power play time. Team #2  
is credited with zero goals against and 2 minutes of 1  
player and composite penalty time against. Penalty to Team  
#1

25

❖ begins at 19:13.

❖10) 19:13 - 19:17: Team #2 scores a goal a 19:17 during a 1  
player power play

❖ advantage. Team #2 is credited with 1 power play goal  
5 for 4 seconds of

❖ 1 player and composite power play time. Team #1 is  
charged 1 power play

10 ❖ goal against for 4 seconds of 1 player and composite  
penalty efficiency

❖ time against.

15 ❖11) 19:17 - 20:00: Time expired with no penalties or goals  
scored. End #2

❖

20 ❖PERIOD #3

❖1) 0:00 - 0:13: A 2 minute penalty was assessed to Team #1

❖ giving Team #2 a power play advantage beginning at 0:13.  
25

❖2) 0:13 - 0:30: A 2 minute penalty was assessed to Team #1

❖ giving Team #2 a 2 player power play advantage beginning  
at 0:30.

❖ Team #2 is charged zero goals for 17 seconds of 1 player  
5 and composite

❖ power play time. Team #1 is credited zero goals against  
for 17 seconds

10 ❖ of 1 player and composite penalty efficiency time.

❖3) 0:30 - 3:11: Team #2 is assessed a 5 minute major  
penalty. Team #2 did not score a goal during a 2 player  
power play advantage that began at 0:30

15

❖ and ended at 2:13, 1 minute and 43 seconds. Team #2 also  
did not score

❖ during the remainder of a 1 player power play advantage  
20 from 2:13 through

❖ 2:30, 17 seconds. Team #2 is charged zero goals for 1  
minute and 43 seconds

25 ❖ of 2 player power play advantage time, zero goals for 17  
seconds of 1

❖ player advantage time and zero goals for 3 minutes and 43 seconds of composite power play time. Team #1 is charged zero goals against for 1 minute and 43 seconds of 2 player penalty efficiency time, zero goals for

5

❖ 17 seconds of 1 player penalty efficiency time and zero goals for 3 minutes and 43 seconds of composite penalty efficiency time against. A 5 minute major power play begins for Team #1 at 3:11.

10

❖

❖ FORMULA #4, TWO PLAYER PENALTY EFFICIENCY:

$((S) * (60) + (T) / (R) / (60) \text{INT} * (60.6))$

15

❖ TEAM #1:

❖ Multiply times 60 S (accrued number of minutes in which a team has two

20

❖ players serving penalty time) S being 1 time 60 equals 60 seconds. Add to T

❖ (accrued number of seconds in which a team has two

25 players serving penalty

❖ time. T being 43, total seconds is 103. Divide by R  
(number of goals scored

❖ against a team when two players are serving penalty  
5 time, R being 0.

❖ When R equals 0 indicating no two player power play  
goals scored against

10 ❖ no average can be acquired and all time accrues. When R  
equals 1

❖ divide by 60, multiply the integer by 60.6. The integer  
being located to

15

❖ the right of the whole number would display in the  
following manner: 1:43

❖ being Team #1 two player penalty efficiency for this  
20 game.

❖4) 3:11 - 11:35: A 2 minute penalty was assessed to Team #1  
at 11:35 giving Team #2 a power play. Team #1 did not score  
a goal within the allotted 5

25



minutes of major play time that started at 3:11. Team #1 is charged zero goals for 5 minutes of 1 player, 5 minutes of major power play time and

5 minutes of composite power play time.

Team #2 is credited with zero goals against for 5 minutes of 1 player,

10 5 minutes of major power play time and 5 minutes of composite penalty time against. Penalty to Team #1 begins at 11:35.

15 FORMULA #5, MAJOR POWER PLAY:  
 $((G) * (60) + (H) / (F) / (60) \text{INT} * (60.6))$

20 TEAM #1:

Multiply times 60 G (accrued number of minutes in which a team has a major

player advantage) G being 5 for a total of 300 seconds.

25 Add to H (accrued

❖ number of seconds in which a team has a major power  
play) H being 0 for a

❖ total of 300 seconds. Divide by F (number of goals  
5 scored by a team when

❖ it has a one player advantage) 0.

❖ When F equals 0 indicating no major power play goals  
10 scored, no average can

❖ be acquired and all time accrues. When F equals 1 divide  
by 60, multiply the

15 ❖ integer by 60.6. The integer being located the right of  
the whole number 5

❖ would display in the following manner: 5:00 being TEAM  
#1 major power play

20

❖ for this game.

❖

25 ❖ FORMULA #6, MAJOR PENALTY EFFICIENCY:

$((S) * (60) + (T) / (R) / (60) \text{INT} * (60.6))$

❖ TEAM #2:

❖ Multiply times 60 S (accrued number of minutes in which a team has a major

5

❖ penalty) S being 5 for a total of 300 seconds. Add to T (accrued

❖ number of seconds in which a team has a major penalty) T  
10 being 0 for a

❖ total of 300 seconds. Divide by R (number of goals allowed by a team when

15 ❖ it has a major penalty) 0.

❖ When R equals 0 indicating no major power play goals allowed by any team

20 ❖ no average can be acquired and all time accrues. When R equals 1

❖ divide by 60, multiply the integer by 60.6.

25 ❖ The integer being located to the right of the whole number 5 would display in the following manner: 5:00 being team #2 major penalty efficiency.

❖ FORMULA #9, HOT SEAT MAJOR TIME EFFICIENCY:

$((S) * (60) + (T) / (R) / (60) \text{INT} * (60.6))$

5 ❖ TEAM #2:

❖ Multiply times 60 S (accrued number of minutes in which a team has a major

10 ❖ penalty) S being 5 for a total of 300 seconds. Add to T (accrued

❖ number of seconds in which a team has a major penalty) T being 0 for a

15

❖ total of 300 seconds. Divide by R (number of goals allowed by a team when

❖ it has a major penalty) 0.

20

❖ When F equals 0 indicating no major power play goals allowed by any team

❖ no average can be acquired and all time accrues. When F  
25 equals 1

❖ divide by 60, multiply the integer 60.6.

❖ The integer being located the right of the whole number  
5

5 ❖ would display in the following manner: 5:00 being TEAM  
#2 goaltender

❖ Hot Seat Major Time Efficiency for this game.

10 ❖5)11:35 - 20:00: The game clock expired. Team #2 did not  
score a goal during

❖ a 2 minute power play 11:35 through 13:35. Team #2 is  
charged zero goals

15

❖ scored, for 2 minutes of 1 player advantage and  
composite power play time.

❖ Team #1 is credited with zero goals against for 2  
20 minutes of 1 player and

❖ composite penalty efficiency time. End #3

25

❖ OVERTIME--None

## CALCULATIONS FOR THE TYPICAL HOCKEY GAME

❖ Under the preferred embodiment, the calculations for  
5 the above typical hockey game are as follows:

FORMULA #1, COMPOSITE POWER PLAY:

$$((D) + (2 * G) * (60) + (E) + (2 * H) / (B) / (60) \text{INT} * (60.6))$$

10 ❖ TEAM #2:

❖ Add D, (accrued number of minutes, in which a team has a  
one player advantage)

15 ❖ D being 6 minutes, to two times G (accrued number of  
minutes in which a team has a

❖ has a two player advantage) G being 1 times 2, added to  
6 equals 8. Multiply this sum 8 by 60, thereby transposing  
20 all

❖ player advantage minutes into 480 seconds. Add the sum  
of 480 seconds to E,

25 ❖ accrued number of seconds in which a team has a one  
player advantage) E being 28 seconds, total 508

seconds, then add again to two times H (accrued number of seconds in which a team

has a two player advantage) 43 seconds times two equals 86 seconds, total is now 594 seconds.

Divide 594 seconds by B (total power play goals scored by a team) B being 1, the sum is 594.

When B equals zero no average can be acquired and all time accrues.

When B equals 1 divide again by 60 thereby transposing the seconds into minutes. The sum is 9.9. Whereby the

9. represents whole total minutes and the fraction represents the integer, .9. The integer

is multiplied by 60.6, the integer calculation producing the whole number 54.

The integer being located the right of the whole number 9 would display in the

following manner: 9:54 being TEAM #2 power play efficiency for this game.

❖

❖ FORMULA #2, COMPOSITE PENALTY EFFICIENCY:

$((P) + (2*S) * (60) + (Q) + (2*T) / (N) / (60) \text{INT} * (60.6))$

5

❖ TEAM #2:

❖ Add P, (accrued number of minutes, in which a team has one player serving penalty time)

10

❖ P being 14 minutes, to two times S (accrued number of minutes in which a team has two players serving penalty time)

15 ❖ S being 2 times 0, added to 14 equals 14. Multiply this sum 14 by 60, thereby transposing all

❖ penalty minutes into 840 seconds. Add the sum of 840 seconds to Q, accrued number of seconds in which

20

❖ a team has one player serving penalty time) Q being 6 seconds, total 846.

❖ Add to two times T (accrued number of seconds in which a  
25 team



❖ has two players serving penalty time) T being 22 seconds  
times two equals 44 seconds.

❖ the total is 890 seconds. Divide 890 seconds by N (total  
5 power play goals scored against a team) N being 0.

❖ When N equals 0 no average can be acquired and all  
penalty time accrues.

10 ❖ When N equals 1 divide by 60 thereby transposing the  
seconds into minutes. The sum is 14.83 whereby the

❖ 14. represents whole total minutes and the fraction  
represents the integer, .83

15

❖ the integer is multiplied by 60.6, the integer  
calculation producing the whole number 50.

❖ The integer being located the right of the whole number  
20 14 would display in the

❖ following manner: 14:50 being TEAM #2 penalty efficiency  
for this game.

25 ❖

❖ FORMULA #3, TWO PLAYER POWER PLAY:

$((G) * (60) + (H) / (F) / (60) \text{INT} * (60.6))$

❖ TEAM #1:

5

❖ Multiply times 60 G (accrued number of minutes in which  
a team has a two

❖ player advantage) 0. Add to H (accrued number of seconds  
10 in which a team

❖ has a two player advantage) 22. Total is 22 seconds.  
Divide by F (number

15 ❖ of goals scored by a team when it has a two player  
advantage) 0.

❖ When F equals 0 indicating no two player power play  
goals scored for

20

❖ in any team no average can be acquired and all time  
accrues. When F equals

❖ 1 divide by 60 and multiply the integer by 60.6.

25

❖ The integer being located the right of the whole number

0

❖ would display in the following manner: 0:22 being TEAM  
#1 two player

5 ❖ power play for this game.

❖

❖ FORMULA #4, TWO PLAYER PENALTY EFFICIENCY:

10  $((S) * (60) + (T) / (R) / (60) \text{INT} * (60.6))$

❖ TEAM #1:

❖ Multiply times 60 S (accrued number of minutes in which  
15 a team has two

❖ players serving penalty time) S being 1 time 60 equals  
60 seconds. Add to T

20 ❖ (accrued number of seconds in which a team has two  
players serving penalty

❖ time. T being 43, total seconds is 103. Divide by R  
(number of goals scored

25

❖ against a team when two players are serving penalty  
time, R being 0.

❖ When R equals 0 indicating no two player power play goals scored against

5 ❖ no average can be acquired and all time accrues. When R equals 1

❖ divide by 60, multiply the integer by 60.6. The integer being located to

10

❖ the right of the whole number would display in the following manner: 1:43

❖ being Team #1 two player penalty efficiency for this  
15 game.

❖

❖ FORMULA #5, MAJOR POWER PLAY:  
20  $((G) * (60) + (H) / (F) / (60) \text{INT} * (60.6))$

❖ TEAM #1:

❖ Multiply times 60 G (accrued number of minutes in which  
25 a team has a major

❖ player advantage) G being 5 for a total of 300 seconds.

Add to H (accrued

❖ number of seconds in which a team has a major power  
5 play) H being 0 for a

❖ total of 300 seconds. Divide by F (number of goals  
scored by a team when

10 ❖ it has a one player advantage) 0.

❖ When F equals 0 indicating no major power play goals  
scored, no average can

15 ❖ be acquired and all time accrues. When F equals 1 divide  
by 60, multiply the

❖ integer by 60.6. The integer being located the right of  
the whole number 5

20

❖ would display in the following manner: 5:00 being TEAM  
#1 major power play

❖ for this game.

25

❖

❖ FORMULA #6, MAJOR PENALTY EFFICIENCY:

$((S) * (60) + (T) / (R) / (60) \text{INT} * (60.6))$

❖ TEAM #2:

5

❖ Multiply times 60 S (accrued number of minutes in which a team has a major

❖ penalty) S being 5 for a total of 300 seconds. Add to T  
10 (accrued

❖ number of seconds in which a team has a major penalty) T being 0 for a

15 ❖ total of 300 seconds. Divide by R (number of goals allowed by a team when

❖ it has a major penalty) 0.

20 ❖ When R equals 0 indicating no major power play goals allowed by any team

❖ no average can be acquired and all time accrues. When R equals 1

25

❖ divide by 60, multiply the integer by 60.6.

❖

❖ GOALTENDER STATISTICS:

5 ❖

❖ All goaltender statistics are determined according  
appearance / time-in

10 ❖ time-out during the course of events.

❖

❖ FORMULA #7, COMPOSITE HOT SEAT:

15  $((P) + (2 * S) * (60) + (Q) + (2 * T) / (N) / (60) \text{INT} * (60.6))$

❖ TEAM #2:

❖ Add P, (accrued number of minutes, in which a team has  
20 one player serving penalty time)

❖ P being 14 minutes, to two times S (accrued number of  
minutes in which a team has two players serving penalty  
time)

25

❖ S being 0 times 2, added to 14 equals 14. Multiply this  
sum 14 by 60, thereby transposing all

- ❖ penalty minutes into 840 seconds. Add the sum of 840 seconds to Q, accrued
- 5 ❖ number of seconds in which a team has one player serving penalty time) Q being 6 seconds, total 846.
- ❖ Add to two times T (accrued number of seconds in which a team
- 10 ❖ has two players serving penalty time) T being 22 seconds times two equals 44 seconds.
- ❖ the total is 890 seconds. Divide 890 seconds by N (total
- 15 power play goals scored against a team) N being 0.
- ❖ When N equals 0 indicating no power play goals scored against a goaltender
- 20 ❖ no average can be acquired and all time accrues. When N equals 1
- ❖ divide by 60 thereby transposing the seconds into minutes. The sum is 14.83 whereby the
- 25 ❖ 14. represents whole total minutes and the fraction represents the integer, .83



❖ the integer is multiplied by 60.6, the integer calculation producing the whole number 50.

5 ❖ The integer being located the right of the whole number 14 would display in the

❖ following manner: 14:50 being TEAM #2 Hot Seat efficiency for this game.

10

❖

❖ FORMULA #8, HOT SEAT TWO PLAYER PENALTY DISADVANTAGE:

$((S) * (60) + (T) / (R) / (60) \text{INT} * (60.6))$

15

❖ TEAM #2

❖

20 ❖ Multiply times 60 S (accrued number of minutes in which a team has two

❖ players serving penalty time) S being 0 time 60 equals 0 seconds. Add to T

25

❖ (accrued number of seconds in which a team has two players serving penalty

❖ time. T being 22, total seconds is 22. Divide by R  
(number of goals scored

5 ❖ against a team when two players are serving penalty  
time, R being 0.

❖ When R equals 0 indicating no two player power play  
goals scored against

10

❖ a goaltender no average can be acquired and all time  
accrues. When R

❖ equals 1 divide by 60, multiply the integer by 60.6.

15

❖ It would display in the following manner: 0:22 being  
TEAM #2 goaltender

❖ Hot Seat two player penalty efficiency for this game.

20

❖

❖ FORMULA #9, HOT SEAT MAJOR TIME EFFICIENCY:

$((S) * (60) + (T) / (R) / (60) \text{INT} * (60.6))$

25

❖ TEAM #2:

❖ Multiply times 60 S (accrued number of minutes in which a team has a major

❖ penalty) S being 5 for a total of 300 seconds. Add to T  
5 (accrued

❖ number of seconds in which a team has a major penalty) T being 0 for a

10 ❖ total of 300 seconds. Divide by R (number of goals allowed by a team when

❖ it has a major penalty) 0.

15 ❖ When F equals 0 indicating no major power play goals allowed by any team

❖ no average can be acquired and all time accrues. When F equals 1

20

❖ divide by 60, multiply the integer 60.6.

❖ The integer being located the right of the whole number

5

25

❖ would display in the following manner: 5:00 being TEAM #2 goaltender

❖ Hot Seat Major Time Efficiency for this game.

❖

5

❖ FORMULA #10, EARNED GOAL AVERAGE:  $((R) - (S) / (Q) - (T) * (60))$

❖ TEAM #1:

10

❖

❖ R (total goals against) 5, minus S (power play goals against) for a sum

15

❖ of 4. Divide by Q minus T (Q being total minutes played by a goaltender)

❖ 40, (T being total power play time faced by a goaltender) 6 minutes for

20

❖ a total of 34. The 5 goals allowed minus the 1 power play goal divided by

❖ 34 minutes equal 0.11 parts of an earned goal per minute

25

of even strength

❖ time. Multiply times 60, the standard amount of time in  
a hockey game. The

❖ total of 7.05 is the average amount of even strength  
5 goals allowed per

❖ every 60 minutes of even strength time faced by Team #1  
goaltender

10 ❖ identified as #31 in this game.

#### DEFINITIONS

15 The definitions applicable to the above calculations  
are as follows:

❖PRD#: PERIOD OF PLAY

20

❖TEAM PP#: POWER PLAY OPPORTUNITY BY TEAM NUMBER

❖IN: ELAPSED GAME CLOCK TIME-IN

25 ❖OUT: ELAPSED GAME CLOCK TIME-OUT

❖PPTB: POWER PLAY TIME BEGIN

❖MLTH: MAXIMUM LENGTH POWER PLAY TIME IN MINUTES

❖PA: PLAYER ADVANTAGE: 1 PLAYER/2 PLAYER/MAJOR TIME

❖TGS: ELAPSED TIME GAME CLOCK ALL GOALS SCORED

5

❖PEN: ELAPSED TIME GAME CLOCK ALL PENALTIES

❖OPP GLTNR: OPPOSING GOALTENDER

10 ❖OG: OPPOSING GOALTENDER SWEATER NUMBER

❖MP: TEAMS OPPOSING GOALTENDER ELAPSED TIME MINUTES PLAYED  
BETWEEN

15 ❖TIME-IN TIME-OUT (ROUNDED OUT TO NEAREST MINUTE PER 30  
SECONDS OF PLAYING TIME)

❖GA: OPPOSING GOALTENDER TOTAL GOALS AGAINST

20 ❖1-PLAYER: 1-PLAYER POWER PLAY ADVANTAGE

❖G: 1-PLAYER POWER PLAY GOALS SCORED

❖M: 1-PLAYER POWER PLAY MINUTES

25

❖S: 1-PLAYER POWER PLAY SECONDS

❖2-PLAYER 2-PLAYER POWER PLAY ADVANTAGE

❖G: 2-PLAYER POWER PLAY GOALS SCORED

5 ❖M: 2-PLAYER POWER PLAY MINUTES

❖S: 2-PLAYER POWER PLAY SECONDS

❖MAJOR: MAJOR POWER PLAY ADVANTAGE

10

❖G: MAJOR TIME POWER PLAY GOALS SCORED

❖M: MAJOR TIME POWER PLAY MINUTES

15 ❖S: MAJOR TIME POWER PLAY SECONDS

❖COMPOSITE: COMPOSITE POWER PLAY ADVANTAGE

❖G: COMPOSITE POWER PLAY GOALS SCORED

20

❖M: COMPOSITE POWER PLAY MINUTES

❖S: COMPOSITE POWER PLAY SECONDS

25 ❖RUNNING TIME: SUB TOTAL OF POWER PLAY GOALS/POWER PLAY TIME  
CREDITED TO A TEAM

❖BY TIME-IN / TIME-OUT OF GAME.

❖1-PLAYER: 1-PLAYER POWER PLAY ADVANTAGE

5 ❖G: 1-PLAYER POWER PLAY GOALS SCORED

❖M: 1-PLAYER POWER PLAY MINUTES

❖S: 1-PLAYER POWER PLAY SECONDS

10

❖2-PLAYER 2-PLAYER POWER PLAY ADVANTAGE

❖G: 2-PLAYER POWER PLAY GOALS SCORED

15 ❖M: 2-PLAYER POWER PLAY MINUTES

❖S: 2-PLAYER POWER PLAY SECONDS

❖MAJOR: MAJOR POWER PLAY ADVANTAGE

20

❖G: MAJOR TIME POWER PLAY GOALS SCORED

❖M: MAJOR TIME POWER PLAY MINUTES

25 ❖S: MAJOR TIME POWER PLAY SECONDS

❖COMPOSITE: COMPOSITE POWER PLAY ADVANTAGE



❑G: COMPOSITE POWER PLAY GOALS SCORED

❑M: COMPOSITE POWER PLAY MINUTES

5

❑S: COMPOSITE POWER PLAY SECONDS

❑OPPOSING GOALTENDER: OPPOSING TEAMS GOALTENDER APPEARING IN  
GAME AT TIME OF EVENT

10

\*\*\*\*\*

15       On page 21, in the section entitled ``References To  
Related Applications'', please delete lines 2-5 and insert:

20       --This application is a continuation-in-part of  
application serial no. 08/664,406, filed June 17, 1996,  
which is a continuation of application serial no.  
08/116,249, filed September 2, 1993, now U.S. patent no.  
5,527,033, dated June 18, 1996, which is a continuation-in-  
part of application serial no. 07/579,410, filed September  
7, 1990, now abandoned.--

25

On page 31, after line 16, please add the following:

--In the preferred embodiment of the invention, an apparatus for determining performance -indicating numbers in sports games, particularly in ice hockey, includes a database having sports games box scores stored therein. The database is stored in a tangible electronic media, such as magnetic media, optical media, electronic media, paper, thermosetting polymers, rubber, metals, or other suitable storage media. Such media includes computer diskettes, magnetic tape, optical disks, random access memory, read only memory, computer punch cards, and other volatile, temporary, and/or permanent memory devices. The database scores box scores, such as start time, stop time, team 1 goals and time of goals, team 1 goalies A and B goals and power plays, and team 2 goalies A and B goals and power plays.

The apparatus for determining performance -indicating numbers in sports games, particularly in ice hockey is turned on at a start switch and a first database is initialized to run, which simulates the start of a hockey game. The database is stored in random access memory as cells of matrix row and column data, such that a first row and column of a conventional sports game box score, of a database is stored as rows and columns and other rows and columns are stored as further rows and columns. Each row of data is read into a bus as a matrix. After initialization each cell of the respective rows are read into the bus. Intermediate statistics are determined electronically. The

intermediate statistics , such as accrued time and power play goals, are determined for a variety of conditions, as described in formulae, which are then communicated to a calculator or computer for computation of final statistics.

5 A time chart may be displayed. After data is processed, then the incrementer increments the database to further rows and columns and the further data is read into the bus, and the intermediate statistics, the final statistics and the visual display are again determined. The incrementer continues to  
10 increment each subsequent row through a series of rows, until the data are completely read onto the bus. Then the intermediate statistics, the final statistics and the visual display are again determined.

With the apparatus of the present invention, the  
15 performance indicating statistics can be electronically displayed after a game or during a game on the aforesaid tangible media, which may include among others, a video split screen display during the course of a game, a sports arena electronic scoreboard, or on any other video display,  
20 such as a global communications network or a television show.--

On page 34, after line 13, please add the following:

--Figure 19 is a block diagram an apparatus 110 for  
determining performance -indicating numbers in sports games,  
5 particularly in ice hockey;

Figure 20 shows a database stored in a random access  
tangible media, describing a box score showing a running  
clock display throughout the game, with reference to both  
10 teams playing the hockey game;

Figure 21 is a database stored in a random access  
tangible media, describing intermediate statistics generated  
by the apparatus 110 for determining performance -indicating  
15 numbers in sports games, particularly in ice hockey, using  
the box score of Figure 20;

Figure 22 is a database stored in a random access  
tangible media, describing final statistics generated by  
20 manipulating the intermediate statistics data of Figure 21;  
and

Figure 23 is a database stored in a random access  
tangible media, describing a final display configuration  
25 perceptible by a user.

On page 64, after line 23, please add the following:

--In the preferred embodiment of the invention, an  
5 apparatus for determining performance-indicating numbers in  
sports games, particularly in ice hockey, includes a  
database having sports games box scores stored therein. The  
database is stored in a tangible electronic media, such as  
magnetic media, optical media, electronic media, paper,  
10 thermosetting polymers, rubber, metals, or other suitable  
storage media. Such media includes computer diskettes,  
magnetic tape, optical disks, random access memory, read  
only memory, computer punch cards, and other volatile,  
temporary, and/or permanent memory devices. The database  
15 scores box scores, such as start time, stop time, team 1  
goals and time of goals, team 1 goalies A and B goals and  
power plays, and team 2 goalies A and B goals and power  
plays.

20 As shown in Figure 19, the apparatus 110 for  
determining performance -indicating numbers in sports games,  
particularly in ice hockey is turned on at start switch 112  
and a first database 114 is initialized to run by  
incrementer 116, which simulates the start of a hockey game.  
25 The database 114 is stored in random access memory as cells  
of matrix row and column data, such that row 1, column 1 of  
box score 118, shown in Figure 20, of database 114 is stored

as  $D_{11}$ , row 1, column 2 is stored as  $D_{12}$ , and row  $m$ , column  $n$  is stored as  $D_{mn}$ . Each row of data is read into bus 120 as a matrix of cells  $D_{11}$  through  $D_{mn}$ . After initialization each cell of row 1, i.e.,  $D_{11}$  through  $D_{1n}$ , represented as  $D_{11} \dots D_{1n}$ ,  
5 is read into the bus 120. A second database 122 of intermediate statistics, as shown in Figure 21 are determined and stored in random access memory, as shown in the block diagram of Figure 19, which will be further described. The second database intermediate statistics 122,  
10 accrued time and power play goals are determined for a variety of conditions, as described in formulae 1-10, which are then communicated to a calculator or computer for computation of final statistics 124 as shown in Fig. 22. A time chart (not shown) may be optionally displayed based  
15 upon final statistics 124 shown in Figure 23. A time chart (not shown) may be optionally displayed based upon final statistics 124 shown in Figure 23.

After data  $D_{11} \dots D_{1n}$  is processed, the incrementer 116  
20 increments the database 114 to row 2 and data  $D_{21} \dots D_{2n}$  is read into bus 120, the intermediate statistics 122, the final statistics 124 and the optional visual display are again determined. The incrementer 116 continues to increment each row through Row  $m$  and, until the data  $D_{11} \dots D_{1n}$  through  
25 and  $D_{m1} \dots D_{mn}$  are completely read onto the bus 120, and the intermediate statistics 122, the final statistics 124 and the optional visual display are determined.

With the apparatus of the present invention, the performance indicating statistics can be electronically displayed after a game or during a game on the aforesaid tangible media, which may include among others, a video split screen display during the course of a game, a sports arena electronic scoreboard, or on any other video display, such as a global communications network or a television show.

Now, in more detail, as shown in FIG. 19, the start switch 112 initializes and turns on timer 128 at substantially the same time as the incrementer 116 is initialized. After initialization, the data cells  $D_{11} \dots D_{1n}$  are read from the database 114 onto the bus 120 and routed from the bus 120 for processing by appropriate circuitry to be herein described. Each of the cells  $D_{11} \dots D_{1n}$  is processed by the circuitry before the incrementer 116 increments to the next row of the database 114.

Elapsed game time-out ( $D_4$ ) is routed to comparator 130. When the time generated by the timer 128 reaches the time indicated by the elapsed game time-out ( $D_4$ ), the comparator 130 turns trigger 132 on, which transmits a trigger pulse to the incrementer 116, which then increments the database 114 to row 2, and so on, until row  $m$  is reached.

Power play time begin( $D_5$ ) is routed to comparator 134. When the time generated by the timer 128 reaches the time indicated by the power play time ( $D_5$ ), the comparator 134 turns trigger 136 on, which transmits a trigger pulse to AND gate and AND gate 140. If there is a signal present from NOT gate 140, then the trigger pulse from the trigger 136 is sent to programmable timer 142 as a start pulse, which starts the programmable timer 142.

Maximum length power play time in minutes ( $D_6$ ) is routed to the programmable timer 142 and is used to set time duration of the programmable timer 142, such that the programmable timer 142 runs for the duration of maximum length power play time in minutes ( $D_6$ ).

Penalty, in this case for Team 2 ( $D_{13}$ ), is routed to storage device 144, which stores the penalty ( $D_{13}$ ) until the power play time begin ( $D_5$ ) begins.

During the time that the programmable timer 142 is running and the penalty, for example for Team 2 ( $D_{13}$ ) is routed to AND circuits 146 and 148, time in minutes and seconds are accrued in adders 150 and 152, respectively. The accrued time in minutes and seconds is routed from the adders 150 and 152 to cells designated as accrued time P and accrued time Q in database 152 for intermediate statistics stored in random access memory, respectively. The



incrementer 116 increments rows of each of the respective  
databases 152 and 114 in synchronization one to the other,  
such that as data is read out of a row, for example row x,  
of the database 114, manipulated data is read into row x of  
5 the database 152.

If a goal is scored, for example for Team 1, then  
elapsed game clock all goals scored ( $D_7$ ) is routed to  
comparator 154, such that the comparator 154 has an output  
10 at the time indicated for the goal scored ( $D_7$ ) when the  
timer 128 output, which is also routed to the comparator  
154, reaches the time indicated by  $D_7$ .

Power play goal by team number ( $D_2$ ) and the output of  
15 the comparator 154 are routed to AND circuit 156, which  
resets the programmable timer 142, when a power play is  
scored by Team 1.

$D_7$  and  $D_2$  are also routed to AND circuit 158, which  
20 routes an output signal to Goal N for Team 1 in the database  
152 for intermediate statistics.

If there is a two player penalty, then programmable  
timer 160 is activated substantially the same manner as the  
25 programmable timer 142, and two player advantage statistics  
are routed to the database 152.

Additional programmable timers (not shown) and associated circuitry (not shown), which is substantially the same as the aforescribed programmable timers and associated circuitry, for one player and player advantages and goals of the opposing team are incorporated into the apparatus 110 for determining performance -indicating numbers in sports games, particularly in ice hockey.

The intermediate statistics from the database 152 may be optionally manipulated by a computer and/or calculator to arrive at final statistics for the hockey game.

A time chart display may be optionally displayed on a cathode ray tube, monitor, or television showing goals scored as the ordinate and with respect to time during each period as the abscissa.

IN THE CLAIMS:

Please cancel pending Claims 1-19 and 21, and add new Claims 22 through 25 as follows:

22. In a converting device for converting a box score in a hockey game eventually to final statistics relative to composite power play, composite penalty efficiency, two-player power play, two-player penalty efficiency, major power play, major penalty efficiency, composite hot seat,

hot seat two-player disadvantage, hot seat major  
disadvantage, or earned goal average, and wherein said final  
statistics are, in turn, obtainable from intermediate  
statistical data, the improvement being wherein said  
5 intermediate statistical data are identifiable by a  
combination of respective characters within, and are  
routable to a calculating means so as to obtain statistics  
therefrom, comprising in combination:

converting means for obtaining said intermediate  
10 statistical data from said box score, said  
converting device including:  
a database for storing said box score;  
means for converting said box score to accrued time and  
goals scored during power plays of opposing teams;  
15 and  
storage means for storing said accrued time and goals  
scored in an intermediate statistical database.

23. The converting device according to claim 22,  
20 wherein said converting means further comprises a timer.

24. In a converting device for converting a box score  
in a simulated hockey game eventually to final statistics  
relative to composite power play, composite penalty  
25 efficiency, two-player power play, two-player penalty  
efficiency, major power play, major penalty efficiency,  
composite hot seat, hot seat two-player disadvantage, hot

seat major disadvantage, or earned goal average, and wherein  
said final statistics are, in turn, obtainable from  
intermediate statistical data, the improvement being wherein  
said intermediate statistical data are identifiable by a  
5 combination of respective characters within, and are  
routable to a calculating means so as to obtain statistics  
therefrom, comprising in combination:

converting means for obtaining said intermediate  
statistical data from said box score, said

10 converting device including:

a database for storing said box score;

means for converting said box score to accrued time and  
goals scored during power plays of opposing teams;  
and

15 storage means for storing said accrued time and goals  
scored in an intermediate statistical database.

25. The converting device according to claim 24,  
wherein said converting means further comprises a timer.

20

#### REMARKS

Applicant submits the within preliminary Amendment,  
which amends the specification and claims.

25

Prior to an examination on the merits, please enter the  
foregoing preliminary amendment.

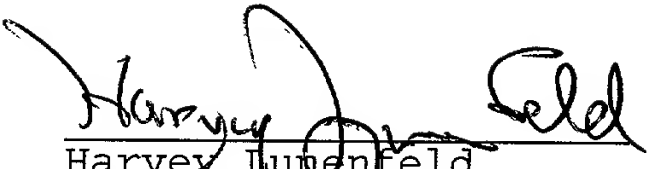
Respectfully submitted,

30

Dated: Jun 6 18, 1997

5

pat6

  
Harvey Lunenfeld  
Reg. No. 26,000  
8 Patrician Drive  
East Northport, NY 11731  
516-754-1000



# Box Score

DATE:

BOXSCORE

EDMONTON VS ANAHEIM

NHL GAME #753

-----TEAM #1-----											-----TEAM #2-----				
PRD	TEAM	GAME	CLOCK												
#	PPG	IN:	OUT:	PPTB	MLTH	TGS	PEN	OG#	MP	GA	TGS	PEN	OG#	MP	GA
1		0:00	1:24	-	0	-	-	31	1	0	1:24	-	31	1	1
1		1:24	2:23	-	0	-	2:23	31	1	0	-	-	31	1	0
1		2:23	5:06	2:23	2	-	-	31	3	0	5:06	-	31	3	1
1		5:06	5:39	-	0	-	-	31	1	0	-	5:39	31	1	0
1		5:39	11:56	5:39	2	-	11:56	31	6	0	-	-	31	6	0
1		11:56	14:27	11:56	2	-	-	31	2	0	-	14:27	31	2	0
1		14:27	15:08	14:27	2	-	-	31	1	0	15:08	-	31	1	1
1		15:08	16:05	-	0	-	-	31	1	0	-	16:05	31	1	0
1		16:05	17:25	16:05	2	-	17:25	31	1	0	-	-	31	1	0
1		17:25	20:00	17:25	2	-	-	31	3	0	-	-	31	3	0
2		0:00	1:01	-	0	-	-	31	1	0	-	1:01	31	1	0
2		1:01	4:57	1:01	2	-	4:57	31	4	0	-	4:57	31	4	0
2		4:57	5:26	-	0	-	-	31	1	0	5:26	-	31	1	1
2		5:26	6:38	-	0	6:38	-	31	1	1	-	-	31	1	0
2		6:38	8:03	-	0	-	8:03	31	1	0	-	-	31	1	0
2		8:03	8:33	8:03	2	-	-	31	1	0	-	8:33	31	1	0
2		8:33	12:12	8:33	2	-	12:12	31	3	0	-	12:12	31	3	0
2		12:12	13:15	-	0	-	-	31	1	0	-	13:15	31	1	0
2		13:15	19:13	13:15	2	-	19:13	31	5	0	-	-	31	5	0
2	2	19:13	19:17	19:13	2	-	-	31	1	0	19:17	-	31	1	1
2		19:17	20:00	-	0	-	-	31	1	0	-	-	31	1	0
3		0:00	0:13	-	0	-	0:13	31	0	0	-	-	30	0	0
3		0:13	0:30	0:13	2	-	0:30	31	1	0	-	-	30	1	0
3		0:30	3:11	0:30	2	-	-	31	2	0	-	3:11	30	2	0
3		3:11	11:35	3:11	5	-	11:35	31	9	0	-	11:35	30	9	0
3		11:35	20:00	-	0	-	-	31	8	0	-	-	30	8	0

OT --- NONE

OPPOSING	GLTDR	MP	GA	OPPOSING	GLTDR	MP	GA
#31:-----		60	1	#31:-----		40	5
#27:-----		0	0	#30:-----		20	0

FIG 20

Intermediate Data

DATE:  
EDM VS ANA  
NHL GAME #753  
#1,2,3,4,7,8  
#5,6  
#9  
#10

INTERMEDIATE DATA

P Q R S T N  
F G H  
R S T  
Q R S T

-----TEAM #1-----																									-----TEAM #2-----																								
PRD	TEAM	GAME	CLOCK	OPP GLTDR 1-PLAYER 2-PLAYER MAJOR COMPOSITE															OPP GLTDR 1-PLAYER 2-PLAYER MAJOR COMPOSITE																														
#	PP #	IN:	OUT:	PPTB	MLTH	PA	GL	PEN	OG	MP	TGS	G	M	S	G	M	S	G	M	S	GL	PEN	OG	MP	TGS	G	M	S	G	M	S	G	M	S															
1		0:00	1:24	-	0	0	-	-	31	1	0	0	0	00	0	0	00	0	0	00	1:24	-	31	1	1	0	0	00	0	0	00	0	00	0	0	00													
1		1:24	2:23	-	0	0	-	2:23	31	1	0	0	0	00	0	0	00	0	0	00	-	-	31	1	0	0	0	00	0	0	00	0	00	0	0	00													
1	2	2:23	5:06	2:23	2	1	-	-	31	3	0	0	0	00	0	0	00	0	0	00	5:06	-	31	3	1	0	2	00	0	0	00	0	00	0	0	00													
1		5:06	5:39	-	0	0	-	-	31	1	0	0	0	00	0	0	00	0	0	00	-	5:39	31	1	0	0	0	00	0	0	00	0	00	0	0	00													
1	1	5:39	11:56	5:39	2	1	-	11:56	31	6	0	0	2	00	0	0	00	0	0	00	-	-	31	6	0	0	0	00	0	0	00	0	00	0	0	00													
1	2	11:56	14:27	11:56	2	1	-	-	31	2	0	0	0	00	0	0	00	0	0	00	-	14:27	31	2	0	0	2	00	0	0	00	0	00	0	0	00													
1	1	14:27	15:08	14:27	2	1	-	-	31	1	0	0	0	41	0	0	00	0	0	00	-	15:08	31	1	1	0	0	00	0	0	00	0	00	0	0	00													
1		15:08	16:05	-	0	1	-	-	31	1	0	0	0	57	0	0	00	0	0	00	-	16:05	31	1	0	0	0	00	0	0	00	0	00	0	0	00													
1	1	16:05	17:25	16:05	2	2	-	17:25	31	1	0	0	0	58	0	0	22	0	0	00	-	-	31	1	0	0	0	00	0	0	00	0	00	0	0	00													
1	2	17:25	20:00	17:25	2	1	-	-	31	3	0	0	0	00	0	0	00	0	0	00	-	-	31	3	0	0	1	20	0	0	00	0	00	0	0	00													
2		0:00	1:01	-	0	0	-	-	31	1	0	0	0	00	0	0	00	0	0	00	-	1:01	31	1	0	0	0	00	0	0	00	0	00	0	0	00													
2	1	1:01	4:57	1:01	2	1	-	4:57	31	4	0	0	2	00	0	0	00	0	0	00	-	4:57	31	4	0	0	0	00	0	0	00	0	00	0	0	00													
2		4:57	5:26	-	0	0	-	-	31	1	0	0	0	00	0	0	00	0	0	00	-	5:26	31	1	1	0	0	00	0	0	00	0	00	0	0	00													
2		5:26	6:38	-	0	0	6:38	-	31	1	1	0	0	00	0	0	00	0	0	00	-	-	31	1	0	0	0	00	0	0	00	0	00	0	0	00													
2		6:38	8:03	-	0	0	-	8:03	31	1	0	0	0	00	0	0	00	0	0	00	-	-	31	1	0	0	0	00	0	0	00	0	00	0	0	00													
2	2	8:03	8:33	8:03	2	1	-	-	31	1	0	0	0	00	0	0	00	0	0	00	-	8:33	31	1	0	0	0	30	0	0	00	0	00	0	0	00													
2	1	8:33	12:12	8:33	2	1	-	12:12	31	3	0	0	0	30	0	0	00	0	0	00	-	12:12	31	3	0	0	0	00	0	0	00	0	00	0	0	00													
2		12:12	13:15	-	0	0	-	-	31	1	0	0	0	00	0	0	00	0	0	00	-	13:15	31	1	0	0	0	00	0	0	00	0	00	0	0	00													
2	1	13:15	19:13	13:15	2	1	-	19:13	31	5	0	0	2	00	0	0	00	0	0	00	-	-	31	5	0	0	0	00	0	0	00	0	00	0	0	00													
2	2	19:13	19:17	19:13	2	1	-	-	31	1	0	0	0	00	0	0	00	0	0	00	-	19:17	31	1	1	1	0	04	0	0	00	0	00	1	0	04													
2		19:17	20:00	-	0	0	-	-	31	1	0	0	0	00	0	0	00	0	0	00	-	-	31	1	0	0	0	00	0	0	00	0	00	0	0	00													
3		0:00	0:13	-	0	0	-	0:13	31	0	0	0	0	00	0	0	00	0	0	00	-	-	30	0	0	0	0	00	0	0	00	0	00	0	0	00													
3	2	0:13	0:30	0:13	2	1	-	0:30	31	1	0	0	0	00	0	0	00	0	0	00	-	-	30	1	0	0	0	17	0	0	00	0	00	0	0	17													
3	2	0:30	3:11	0:30	2	2	-	-	31	2	0	0	0	00	0	0	00	0	0	00	-	3:11	30	2	0	0	0	17	0	1	43	0	0	00	3	43													
3	1	3:11	11:35	3:11	5	M	-	11:35	31	9	0	0	5	00	0	0	00	0	0	00	-	11:35	30	9	0	0	0	00	0	0	00	0	00	0	0	00													
3		11:35	20:00	-	0	0	-	-	31	8	0	0	0	00	0	0	00	0	0	00	-	-	30	8	0	0	0	00	0	0	00	0	00	0	0	00													
OT --- NONE																																																	
GAME TOTALS---																									0 14 06 0 0 22 0 5 00																								
COMPOSITE ---																									0 14 50																								
																									1 9 54																								

GOALTENDER STATISTICS

TEAM #1		MP TGS			
#31		40	1	1	5 54
#30		20	0	0	4 00
TEAM #2					
#31		60	5	0	14 50
#27		00	0	0	0 00

FIG 21



Final Statistics

EDM VS ANA

NHL GAME #753

FORMULAS 1,2,3,4,7,8

FORMULAS 5,6,9

FORMULA 10

P Q R S T N

R S T

S T

D E F G H B

F G G

7

7

7

7

PRD TEAM GAME CLOCK										TEAM #1 RUNNING TIME										TEAM #2 RUNNING TIME										
#	PP	#	IN:	OUT:	PFTB	MLTH	PA	TGS	PEN	OG	MP	GA	G	M	S	G	M	S	G	M	S	G	M	S	G	M	S	G	L	
1		1	0:00	1:24	-	0	0	-	-	31	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
1		1	1:24	2:23	-	0	0	-	2:23	31	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
1		1	2:23	5:06	2:23	2	1	-	-	31	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
1		1	5:06	5:39	-	0	0	-	-	31	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
1		1	5:39	11:56	5:39	2	1	-	11:56	31	6	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
1		1	11:56	14:27	11:56	2	1	-	-	31	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
1		1	14:27	15:08	14:27	2	1	-	-	31	1	0	0	0	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
1		1	15:08	16:05	-	0	1	-	-	31	1	0	0	0	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
1		1	16:05	17:25	16:05	2	2	-	17:25	31	1	0	0	0	58	0	0	22	0	0	0	0	0	0	0	0	0	0	0	31
1		1	17:25	20:00	17:25	2	1	-	-	31	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
2		2	0:00	1:01	-	0	0	-	-	31	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
2		2	1:01	4:57	1:01	2	1	-	4:57	31	4	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
2		2	4:57	5:26	-	0	0	-	-	31	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
2		2	5:26	6:38	-	0	0	6:38	-	31	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
2		2	6:38	8:03	-	0	0	-	8:03	31	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
2		2	8:03	8:33	8:03	2	1	-	-	31	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
2		2	8:33	12:12	8:33	2	1	-	12:12	31	3	0	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
2		2	12:12	13:15	-	0	0	-	-	31	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
2		2	13:15	19:13	13:15	2	1	-	19:13	31	5	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
2		2	19:13	19:17	19:13	2	1	-	-	31	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
2		2	19:17	20:00	-	0	0	-	-	31	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31

OT --- NONE

GOALTENDER STATISTICS

TEAM #1

#31 40 1 1 5 54

#30 20 0 0 4 00

TEAM #2

#31 60 5 0 14 50

#27 00 0 0 0 00

FIG 22

Display

DISPLAY

EDMONTON VS ANAHEIM

NHL GAME #753

TEAMS POWER PLAY

	1-PLAYER	2-PLAYER	MAJOR	COMPOSITE	AVG
	G MIN/SEC	G MIN/SEC	G MIN/SEC	G MIN/SEC	TIME
TEAM #1 EDM 0	14:06	0 0:22	0 5:00	0 14:50	14:50+
TEAM #2 ANA 1	6:28	0 1:43	0 0:00	1 9:54	9:54

TEAMS PENALTY EFFICIENCY

	1-PLAYER	2-PLAYER	MAJOR	COMPOSITE	AVG
	G MIN/SEC	G MIN/SEC	G MIN/SEC	G MIN/SEC	TIME
TEAM #1 EDM 1	6:28	0 1:43	0 0:00	1 9:54	9:54
TEAM #2 ANA 0	14:06	0 0:22	0 5:00	0 14:50	14:50

GOALTENDERS STATISTICS

HOT SEAT

TEAM #	1-PLAYER	2-PLAYER	MAJOR	COMPOSITE	AVG
	G MIN/SEC	G MIN/SEC	G MIN/SEC	G MIN/SEC	TIME
#1 31	1 5:54	0 0:00	0 0:00	1 5:54	5:54
#1 30	0 0:34	0 1:43	0 0:00	0 4:00	4:00
#2 31	0 14:06	0 0:22	0 5:00	0 14:50	14:50
#2 27	0 0:00	0 0:00	0 0:00	0 0:00	0:00

EARNED GOAL AVERAGE

TEAM #	TMP	TGA	PPMA	PPGA	E.G.A.
#1 31	40	5	5:54	1	7.06
#1 30	20	0	4:00	0	0.00
#2 31	60	1	14:50	0	1.33
#2 27	0	0	0:00	0	0.00

FIG 23

CERTIFICATE OF MAILING

I hereby certify that the attached correspondence is  
5 being deposited with the United States Postal Service as  
Express Mail No. *EM 370 717 096 US*  
addressed to:

Commissioner of Patents  
10 Washington, D.C. 20231,

on the date indicated below.

Date: *JUNE 18*, 1997

15

*Harvey J. Beld*

20


IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PETITION FOR EXTENSION OF TIME

APPLICANT: Anthony Puma  
SERIAL NO.: 07/579,410  
FILED: Sept. 7, 1990  
EXAMINER: K. Tran  
GROUP ART UNIT: 2311  
MAILING DATE OF ACTION: April 2, 1993  
TITLE: APPARATUS AND METHOD FOR  
CALCULATING A COMPARATIVE SCORING  
RATING FOR TEAMS AND PLAYERS IN A  
HOCKEY GAME

Applicant hereby requests a two (2) month extension of time to respond to the Office Action dated April 2, 1993 from July 2, 1993 to September 2, 1993 and submits an extension fee of \$180 herein.

Date: Sept. 2, 1993

  
\_\_\_\_\_  
Alfred M. Walker  
Attorney for Applicant  
Reg. No. 29,983  
742 Veterans Memorial Hwy  
Hauppauge, N. Y. 11788  
516-361-8737

PT06

Anthony Puma et al  
Continuation in part application filed  
with 2 month extension request & \$180

ANTHONY PUMA  
2 LILAC RD.  
WESTHAMPTON BEACH, NY 11978

218

August 31, 1993

1-148-79  
280

Pay to the order of Commissioner of Patents

One hundred eighty dollars

\$ 180.00

100 Dollars

**EAB**

120 E Sunrise Hwy.  
North Lindenhurst, NY 11757

2 months

Memo Extension 07/579,410

10-91  
Anthony Puma

00280014890 079048985 21 0219

CERTIFICATE OF MAILING BY EXPRESS MAIL

I certify that this correspondence is being deposited with the United States Postal Service as Express Mail No. RB796482610US in an envelope addressed to the Commissioner of Patents, Washington, D.C. 20231 on the date indicated below.

Date: Sept. 2, 1993

pat27

Alfred

HARVEY LUNENFELD  
8 PATRICIAN DRIVE  
EAST NORTHPORT, NY 11731  
516-754-1000

September 25, 1996

COPY

Commissioner of Patents  
Attn: Application Processing Division  
Special Processing & Correspondence Branch  
Washington, D.C. 20231

APPLICANT: Anthony Puma  
SERIAL NO.: 08/664,406  
FILED: June 17, 1996  
TITLE: APPARATUS FOR DETERMINING PERFORMANCE-  
INDICATING NUMBERS IN SPORTS GAMES,  
PARTICULARLY IN ICE-HOCKEY

Dear Sir:

Enclosed please find:

Response to Notice of Missing Parts  
Check for \$495.00  
Copy of Notice to Missing Parts  
Certificate of Mailing

Please acknowledge receipt on the enclosed postcard.

Respectfully submitted,

  
Harvey Lunenfeld  
Reg. No. 26,000

CERTIFICATE OF MAILING

I hereby certify that the attached correspondence is being  
deposited with the United States Postal Service as Express Mail No.  
EM594597115US addressed to:

Commissioner of Patents, Attn: Application Processing Division, Special  
Processing & Correspondence Branch  
Washington, D.C. 20231, on the date indicated below:

Date: September 25, 1996

  
Joyce Peterson



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Anthony Puma  
SERIAL NO.: 08/664,406  
FILED: June 17, 1996  
TITLE: APPARATUS FOR DETERMINING PERFORMANCE-  
INDICATING NUMBERS IN SPORTS GAMES,  
PARTICULARLY IN ICE-HOCKEY

RESPONSE TO NOTICE OF MISSING PARTS

In response to the Notice of Missing Parts dated July 25, 1996, Applicant hereby submits the following:


Check in the amount of \$495.00, which includes filing fee of \$375.00, surcharge of \$65.00 and one month extension fee (August 25, 1996 to September 25, 1996) of \$55.00;

Copy of Notice of Missing Parts; and  
Certificate of Mailing.

Please acknowledge receipt by returning the enclosed postcard.

Dated: September 25, 1996

Respectfully submitted,

  
Harvey Lunenfeld  
Agent for Applicant  
Reg. No. 26,000

8 Patrician Drive  
E. Northport, NY 11731  
516-754-1000

a:pat40



**UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO./TITLE
--------------------	-------------	-----------------------	---------------------------

09/664,406 06/17/96 PUMA

A

0212/0725

HARVEY LUNENFELD  
8 PATRICIAN DRIVE  
F NORTHPORT NY 11731

0000

07/25/96

**NOTICE TO FILE MISSING PARTS OF APPLICATION  
FILED UNDER 37 CFR 1.60 FILING DATE GRANTED**

A filing date has been granted to this application filed under 37 CFR 1.60. However, the items indicated below are missing. The required items and fees identified below must be timely submitted **ALONG WITH THE PAYMENT OF A SURCHARGE** for items 1 and 3 of \$ 170 for large entities or \$ 0 for small entities who have complied with 37 CFR 1.28(a). The surcharge is set forth in 37 CFR 1.16 (e).

If all required items on this form are filed within the period set below, the total amount owed by applicant as a ☒ large entity, ☐ small entity (verified statement filed), is \$ 887.

Applicant is given ONE MONTH FROM THE DATE OF THIS LETTER, OR TWO MONTHS FROM THE FILING DATE of this application, WHICHEVER IS LATER, within which to file all required items and pay any fees required above to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136 (a).

1. ☒ The statutory basic filing fee is: ☒ missing ☐ insufficient. Applicant as a ☒ large entity, ☐ small entity, must submit \$ 750 to complete the basic filing fee.
2. ☐ Additional claim fees of \$ \_\_\_\_\_ as a ☐ large entity ☐ small entity, including any required multiple dependent claim fee, are required. Applicant must submit the additional claim fees or cancel the additional claims for which fees are due.
3. ☐ The application was filed under 37 CFR 1.60. The copy of the oath or declaration ☐ is missing ☐ does not show applicant(s) signature or an indication it was signed. A copy of the signed oath or declaration originally filed in the prior complete application is required.
4. ☐ OTHER:

Direct the response and any questions about this notice to, Attention: Application Processing Division, Special Processing and Correspondence Branch.

***A copy of this notice MUST be returned with the response.***

Customer Service

APPLICATION PROCESSING DIVISION  
(703) 308-1202

ANTHONY PUMA  
08/664,406

5

1898

RESPONSE TO NOTICE OF MISSING PARTS  
CHECK FOR \$495.00  
COPY OF NOTICE TO MISSING PARTS  
CERTIFICATE OF MAILING

ars

Respectfully submitted,

525

9/24 1956

1-148 98  
280

to the Commissioner of Patents \$ 49500  
or one hundred ninety-five dollars ~~75~~ 75 Dollars

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**AB** 691 Route 25A  
Miller Place, NY 11764

708/664,406

211 0525

0014891: 079-48985 211 0529

項目	単位	数値	単位	数値
1. 総人口	人	1,234,567	2. 男性人口	612,345
3. 女性人口	人	622,222	4. 人口密度	人/平方キロメートル
5. 出生率	‰	12.5	6. 死亡率	‰
7. 自然増減率	‰	1.5	8. 総世帯数	世帯
9. 平均年齢	歳	35.2	10. 高齢化率	%
11. 労働人口	人	567,890	12. 失業率	%
13. 平均年収	円	3,456,789	14. 消費税率	%
15. 教育費	円	123,456,789	16. 医療費	円
17. 住宅費	円	98,765,432	18. 交通費	円
19. 食料費	円	76,543,210	20. 娯楽費	円
21. 税金	円	54,321,098	22. 社会保険料	円
23. 貯蓄率	%	15.8	24. 負債率	%
25. 投資額	円	234,567,890	26. 利益率	%
27. 生産高	億円	12,345,678	28. 輸出額	億円
29. 輸入額	億円	9,876,543	30. 貿易収支	億円
31. 財政収支	億円	7,654,321	32. 国債発行額	億円
33. 地方債発行額	億円	5,432,109	34. 法人税	億円
35. 個人所得税	億円	3,210,987	36. 消費税	億円
37. 法人住民税	億円	1,098,765	38. 個人住民税	億円
39. 地方交付金	億円	8,765,432	40. 国庫補助金	億円
41. 地方債償還	億円	6,543,210	42. 国債償還	億円
43. 地方債発行	億円	4,321,098	44. 国債発行	億円
45. 地方債償還	億円	2,109,876	46. 国債償還	億円
47. 地方債発行	億円	1,987,654	48. 国債発行	億円
49. 地方債償還	億円	1,765,432	50. 国債償還	億円
51. 地方債発行	億円	1,543,210	52. 国債発行	億円
53. 地方債償還	億円	1,321,098	54. 国債償還	億円
55. 地方債発行	億円	1,109,876	56. 国債発行	億円
57. 地方債償還	億円	987,654	58. 国債償還	億円
59. 地方債発行	億円	865,432	60. 国債発行	億円
61. 地方債償還	億円	743,210	62. 国債償還	億円
63. 地方債発行	億円	621,098	64. 国債発行	億円
65. 地方債償還	億円	500,000	66. 国債償還	億円
67. 地方債発行	億円	400,000	68. 国債発行	億円
69. 地方債償還	億円	300,000	70. 国債償還	億円
71. 地方債発行	億円	200,000	72. 国債発行	億円
73. 地方債償還	億円	100,000	74. 国債償還	億円
75. 地方債発行	億円	50,000	76. 国債発行	億円
77. 地方債償還	億円	25,000	78. 国債償還	億円
79. 地方債発行	億円	12,500	80. 国債発行	億円
81. 地方債償還	億円	6,250	82. 国債償還	億円
83. 地方債発行	億円	3,125	84. 国債発行	億円
85. 地方債償還	億円	1,562	86. 国債償還	億円
87. 地方債発行	億円	781	88. 国債発行	億円
89. 地方債償還	億円	390	90. 国債償還	億円
91. 地方債発行	億円	195	92. 国債発行	億円
93. 地方債償還	億円	97	94. 国債償還	億円
95. 地方債発行	億円	48	96. 国債発行	億円
97. 地方債償還	億円	24	98. 国債償還	億円
99. 地方債発行	億円	12	100. 国債発行	億円
101. 地方債償還	億円	6	102. 国債償還	億円
103. 地方債発行	億円	3	104. 国債発行	億円
105. 地方債償還	億円	1	106. 国債償還	億円
107. 地方債発行	億円	0.5	108. 国債発行	億円
109. 地方債償還	億円	0.25	110. 国債償還	億円
111. 地方債発行	億円	0.125	112. 国債発行	億円
113. 地方債償還	億円	0.0625	114. 国債償還	億円
115. 地方債発行	億円	0.03125	116. 国債発行	億円
117. 地方債償還	億円	0.015625	118. 国債償還	億円
119. 地方債発行	億円	0.0078125	120. 国債発行	億円
121. 地方債償還	億円	0.00390625	122. 国債償還	億円
123. 地方債発行	億円	0.001953125	124. 国債発行	億円
125. 地方債償還	億円	0.0009765625	126. 国債償還	億円
127. 地方債発行	億円	0.00048828125	128. 国債発行	億円
129. 地方債償還	億円	0.000244140625	130. 国債償還	億円
131. 地方債発行	億円	0.0001220703125	132. 国債発行	億円
133. 地方債償還	億円	0.00006103515625	134. 国債償還	億円
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137. 地方債償還	億円	0.0000152587890625	138. 国債償還	億円
139. 地方債発行	億円	0.00000762939453125	140. 国債発行	億円
141. 地方債償還	億円	0.000003814697265625	142. 国債償還	億円
143. 地方債発行	億円	0.0000019073486328125	144. 国債発行	億円
145				

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UNITED STATES POSTAL SERVICE

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0.5		1657		COD	
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ALFRED WALKER, ATTY AT LAW  
742 VETERANS HWY  
HAUPPAUGE NY 11789-2300

TO: (PLEASE PRINT)

Commissioner of Patents  
Washington DC 20231

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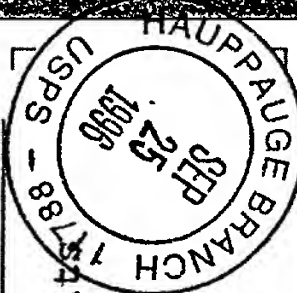
PHONE

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PHONE

Puma

FOR PICKUP OR TRACKING CALL 1-800-275-8777



CUSTOMER COPY

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Anthony Puma

Filed : Sept. 2, 1993

For : Apparatus for determining .....in Ice-Hockey

Ser. No. : Continuation-in-part of S/N 07/570,410 filed on  
09/07/'90

Ser. No. : 08/116,249

COPY

PRELIMINARY AMENDMENT

Hon. Commissioner of Patents and Trademarks

Washington, D.C. 20231

S i r,

Kindly please amend as follows:

p. 11, second line up from the bottom, substitute --defense  
men-- for "defenseman";

p. 12, l. 15, replace "too" with --to--;

p. 15, l. 17, after "not" add --in--;

p. 16, l. 2, replace "man" with --men--;

p. 17, last line, change "is" to --in--;

p. 20, l. 19, replace "post" with --posts--;

p. 27, ll. 6, 10, 17, and 21, after "seconds" add --in--;

ll. 8, 15, and 19, after "minutes" add --in--;

last line, replace "they have" with --it has--;

p. 28, ll. 2 and 20, after "minutes" add --in--;

l. 8, delete "at a";

ll. 10 and 12, delete "a";

11. 10 and 20, after "minutes" add --in--;  
 11. 12 and 22, after "seconds" add --in--;  
 1. 15, replace "man" with --men--;  
 1. 18, replace "they have" with --it has--;  
 p. 29, 1. 1, after "minutes" add --in--;  
 1. 3, after "seconds" add --in--;  
 p. 31. 11. 7, 14, and 16, replace "they are" with --it is--;  
 . 11. 11 and 18, replace "their" with --its--;  
 p. 32, 1. 3, replace "man" with --player--;  
 11. 4 and 6, replace "they are" with --it is--;  
 p. 36, 1. 6, delete ".";  
 1. 16, replace "their" with --its--;  
 p. 47, second line up, replace "the" with --an--;  
 p. 48, 6th line up from bottom, delete one occurrence of  
 "mobile"  
 p. 55. 1. 15, after "to" add --a--;  
 p. 56. 1. 9, change "ree" to --reel--;  
 p. 59, 1. 8, change "90" to --98--;  
 p. 60, 1. 4, after "70" add --is--;  
 1. 9, after "while" add --Fig.--;  
 p. 62, 1. 5, change "rotating" to --rotation--;  
 p. 66, last line, change "adn" to --and--;  
 p. 67, 7th line up from bottom, delete "is";  
 p. 69, 1. 11, replace "LLENGTH" with --LENGTH--;  
 1. 13, replace "this is" with --the rules are--;  
 1. 14, replace "Section B" with --the section of the rules  
 governing the game of ice-hockey--; after  
 "application" add --(pp. 9-24)--;

p. 70, l. 3, after "B" add -- The tape dispenser includes tapes  
of respective multiple colors."

p. 71, l. 7, after "on" add --the--;

p. 73, ll. 9 and 24, replace "man" with --players--;  
ll. 12, 17 and 26, replace "man" with --player--;

p. 75, ll. 5, 18 and 23, replace each occurrence of "man" with  
--player--;

l. 6, after "on" add --in--;

p. 76, ll. 13 and 16, after "on" add --the--;

l. 26, replace "an" with --player--;

l. 4, after "on" add --the";

ll. 1, 17, and 20, replace "man" with --player--;

p. 78, ll. 1, 8, 11 and 16, replace "man" with --player--;

p. 80, l. 13, change "time" to --timing--;

l. 17, change "the longitudinal timing chart to --said  
timing chart, which is longitudinal--;

l. 20, correct the spelling of "followed";

p. 82, ll. 10, 11, 12 and 20, change "position" to --placement--;

p. 83, delete in its entirety (it was a duplicate of page 82):

p. 84, 4th line up, change "include" to --including--;

p. 88, l. 18, change "dis-played" to --displayed--;

p. 89, 8th line up from bottom, correct the spelling of "chain";

p. 91, l. 2, after "to" add --said--;

p. 92, 3rd line up from bottom, before "is" add --and wherein the  
connecting device--; change "time" to --having a timing  
chart--.



Remarks.

The present amendment mainly corrects minor spelling and typographical errors, and it is respectfully requested that it be entered.

Respectfully submitted

Alfred M. Walker

742 Veterans Memorial Highway

Hauppauge, New York 11788

Tel. (516) 361-8792

as filed

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Anthony Puma, John Mizzi and Erwin Teltscher  
SERIAL NO.: 08/116,249  
FILED: September 2, 1993  
EXAMINER: to be assigned  
GROUP ART UNIT: 2311  
TITLE: APPARATUS FOR DETERMINING PERFORMANCE-  
INDICATING NUMBERS IN SPORTS GAMES,  
PARTICULARLY IN ICE HOCKEY

COPY

SECOND PRELIMINARY AMENDMENT

Kindly amend the pending application as follows:

Please add new Claim 21:

--21. In a converting device for converting a box score in a simulated hockey game eventually to final statistics relating to composite power play, composite penalty efficiency, two-player power play, two-player penalty efficiency, major power play, major penalty efficiency, composite hot seat, hot seat two-player disadvantage, hot seat major disadvantage, or earned goal average, and wherein said final statistics are, in turn, obtainable from intermediate statistical data, the improvement being wherein said intermediate statistical data are identifiable by a combination of respective indicia, and are feedable into a calculating means so as to obtain final statistics therefrom, comprising in combination:

a means for displaying a time chart;

converting means for obtaining said intermediate statistical data from said box score, said converting device including:

said means for displaying a time chart being calibrated at predetermined intervals, denotable for a first of indicia associated with a first entrant team and a second set of indicia associated with a second entrant team normally opposing said first entrant team;

a visual indicating means for displaying said first set of indicia and said second set of indicia;

a measuring means for measuring and comparing said first set of indicia with said second set of indicia at said predetermined intervals;

means for recording said first set of indicia and said second set of indicia in a visually readable form;

marking means for visually displaying said first set of indicia and said second set of indicia upon said time chart;

said measuring means comparing said first set of indicia and said second set of indicia, said first set of indicia and said second set of indicia each comprising separately an actual number of minutes and seconds served in penalty time in a game by the first team entrant and the second team entrant;

said first set of indicia being indicative of the scoring or defending ability of the first team entrant, said second set of indicia being indicative of the scoring or defending ability of the second team entrant;

said measuring means comparing said first set of indicia and said second set of indicia and producing an output of a comparative ranking of said first set of indicia of said first entrant team with respect to rankings of said second set of indicia of said second team entrant;

means for converting the output to actual time in minutes and seconds;

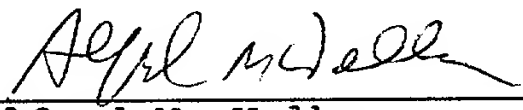
means for displaying the comparative ranking data onto said visual display.--

#### REMARKS

As a second preliminary amendment, Applicant amends the application by adding new Claim 21.

Respectfully submitted,

Dated: July 28 , 1994

  
Alfred M. Walker  
Attorney for Applicant  
Reg. No. 29,983  
742 Veterans Memorial Highway  
Hauppauge, New York 11788  
(516) 361-8737

A: SUPPAMD4

CERTIFICATE OF MAILING

I hereby certify that the attached correspondence is  
being deposited with the United States Postal Service as  
first class mail addressed to:

COMMISSIONER OF PATENTS  
WASHINGTON DC 20231

on the date indicated below.

Date: July 29, 1994

  
\_\_\_\_\_  
Alfred Walker

PT02

*as filed*

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: John Mizzi, Erwin Teltscher and Anthony Puma

SERIAL NO.: 08/116,249

FILED: September 2, 1993

EXAMINER: Unassigned

GROUP ART UNIT: 2311

MAILING DATE OF ACTION:

TITLE: APPARATUS FOR DETERMINING PERFORMANCE-INDICATING NUMBERS IN SPORTS GAMES, PARTICULARLY IN ICE HOCKEY.

COPY

THIRD PRELIMINARY AMENDMENT

As a preliminary amendment, Applicant amends the application as follows:

IN THE SPECIFICATION

On page 27, line 4, after "(60)" please add  
--INT\*(60.6)--.

On page 27, line 13, after "advantage" please add  
--INT = Integer--.

On page 27, line 15, after "(60)" please add  
--INT\*(60.6)--

On page 27, line 24, after "time" please add  
--INT = Integer--

On page 27, line 26, after "(60)" please add  
--INT\*(60.6)--

On page 28, line 5, after "advantage" please add  
--INT = Integer--



On page 30, line 8, after "time" please add  
--INT = Integer--

On page 30, line 10, after "(60)" please add  
--INT\*(60.6)--

On page 30, line 14, after "goaltender" please add  
--INT = Integer--


#### REMARKS

As a preliminary amendment, Applicant adds the above noted amendments to the specification, which include further refinements of the algorithm in the software contained in the specification filed on Sept. 2, 1993, which refinements were published on July 23, 1993 in Applicant's related copyright registration TX 578 944 entitled "Hockey: Special Teams Statistics/Time Frame Basis". These refinements were inadvertently left out of Applicant's above identified patent application filed September 2, 1993.

Applicant submits that the subject matter is allowable, which allowance is earnestly solicited.

Respectfully submitted,

Dated: July 28<sup>th</sup>, 1994

  
Alfred M. Walker  
Attorney for Applicant  
Reg. No. 29,983

742 Veterans Memorial Highway  
Hauppauge, New York 11788  
(516) 361-8737



as good


COPY

[illegible]

Dear Sir:

In response to the Examiner's restriction requirement dated Sept. 26, 1994, Applicant hereby elects to restrict the pending application to the invention designated as Group I, namely in Claims 1-19 and 21 drawn to a hockey score converting device.

Respectfully submitted,

  
 Alfred M. Walker  
 Attorney for Applicants  
 Reg. No. 29,983  
 742 Veterans Memorial Highway  
 Hauppauge, New York 11788  
 (516) 361-8737

Sept 30, 1994

PAT8

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Anthony Puma, John Mizzi and Erwin Teltscher  
SERIAL NO.: 08/116,249  
FILED: September 2, 1993  
EXAMINER: to be assigned  
GROUP ART UNIT: 2311  
TITLE: APPARATUS FOR DETERMINING PERFORMANCE-  
INDICATING NUMBERS IN SPORTS GAMES,  
PARTICULARLY IN ICE HOCKEY

COPY

SECOND PRELIMINARY AMENDMENT

Kindly amend the pending application as follows:

Please add new Claim 21:

--21. In a converting device for converting a box score in a simulated hockey game eventually to final statistics relating to composite power play, composite penalty efficiency, two-player power play, two-player penalty efficiency, major power play, major penalty efficiency, composite hot seat, hot seat two-player disadvantage, hot seat major disadvantage, or earned goal average, and wherein said final statistics are, in turn, obtainable from intermediate statistical data, the improvement being wherein said intermediate statistical data are identifiable by a combination of respective indicia, and are feedable into a calculating means so as to obtain final statistics therefrom, comprising in combination:

a means for displaying a time chart;

converting means for obtaining said intermediate statistical data from said box score, said converting device including:

said means for displaying a time chart being calibrated at predetermined intervals, denotable for a first of indicia associated with a first entrant team and a second set of indicia associated with a second entrant team normally opposing said first entrant team;

a visual indicating means for displaying said first set of indicia and said second set of indicia;

a measuring means for measuring and comparing said first set of indicia with said second set of indicia at said predetermined intervals;

means for recording said first set of indicia and said second set of indicia in a visually readable form;

marking means for visually displaying said first set of indicia and said second set of indicia upon said time chart;

said measuring means comparing said first set of indicia and said second set of indicia, said first set of indicia and said second set of indicia each comprising separately an actual number of minutes and seconds served in penalty time in a game by the first team entrant and the second team entrant;

said first set of indicia being indicative of the scoring or defending ability of the first team entrant, said second set of indicia being indicative of the scoring or defending ability of the second team entrant;

said measuring means comparing said first set of indicia and said second set of indicia and producing an output of a comparative ranking of said first set of indicia of said first entrant team with respect to rankings of said second set of indicia of said second team entrant;

means for converting the output to actual time in minutes and seconds;

means for displaying the comparative ranking data onto said visual display;

all of said means being operating in accordance with the relationships in the following formulas:

$$( (D5) + (2*G5) * (60) + (E5) + (2*H5) / (B5) / (60) )$$

where D is the accrued number of minutes in which a team has a one man advantage and where E is the accrued number of seconds beyond whole minutes in which a team has a one man advantage and where H is the accrued number of seconds beyond whole minutes in which a team has a two man advantage, where B is the total number of power plays goals scored by a team, where G is the number of minutes in which a team has a two man advantage and where 5 is an arbitrary number associated to identify a team;

$$( (P5) + (2*S5) * (60) + (Q5) + (2*T5) / (N5) / (60) )$$

where P is the accrued number of minutes in which a team has one player serving penalty time and where S is the accrued number of minutes in which a team has two players serving penalty time and where Q is the accrued number of seconds beyond whole minutes in which a team has one player serving

penalty time and where T is the accrued number of seconds beyond whole minutes in which a team has two players serving penalty time where N is the total number of power play goals scored against a team and where 5 is an arbitrary number associated to identify a team;

$$( (G*60) + (H5) / (F5) / (60) )$$

where G is the accrued number of minutes in which a team has two players serving penalties and where t is the accrued number of seconds beyond whole minutes in which a team has two players serving major time penalties, in which r is the number of goals scored against a team when it has two players serving penalties and where 5 is an arbitrary number associated to identify a team;

$$( (V5*60) + (W5) / (U5) / (60) )$$

where U is the number of goals scored by a team when they possess a major time advantage, where V is the accrued number of minutes in which a team has a major time advantage, where W is the accrued number of seconds beyond whole minutes in which a team has a major time advantage, where \* is the symbol for the arithmetical function of multiplication, where / is the symbol for the arithmetical function of division, where + is the symbol for the arithmetical function of addition and where 5 is an arbitrary number associated to identify a team;

$$( (y5)*60) + (z5) / (x5) / (60) )$$

where x is the number of goals scored against a team when it is serving major time penalties, where y is the accrued

number of minutes in which a team is serving major time penalties, where  $z$  is the accrued number of seconds beyond whole minutes in which a team is serving a major time disadvantage, where  $*$  is the symbol for the arithmetical function of multiplication, where  $/$  is the symbol for the arithmetical function of division, where  $+$  is the symbol for the arithmetical function of addition and where 5 is an arbitrary number associated to identify a team.--

REMARKS

As a second preliminary amendment, Applicant amends the application by adding new Claim 21.

Respectfully submitted,

Dated: March , 1994

---

Alfred M. Walker  
Attorney for Applicant  
Reg. No. 29,983  
742 Veterans Memorial Highway  
Hauppauge, New York 11788  
(516) 361-8737

A: SUPPAMD2

## ISSUE NOTIFICATION



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

APPLICATION NUMBER	PATENT NUMBER	ISSUE DATE	ATTORNEY DOCKET NO.
08/116,249	5527033	06/18/96	

7033

7707

ALFRED M. WALKER  
742 VETERANS MEMORIAL HIGHWAY  
HAUPPAUGE, NY 11788

COPY

APPLICANT(S) ANTHONY PUMA, ROCKY POINT NEW YORK; JOHN MIZZI,  
POUGHKEEPSIE NEW YORK; ERWIN S. TELTSCHER, ROSLYN  
NEW YORK



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS: Anthony Puma et al  
SERIAL NO.: 08/116,249  
FILED: September 2, 1993  
EXAMINER: J. Harrison  
GROUP ART UNIT: 3304  
MAILING DATE OF ACTION: December 15, 1995  
TITLE: APPARATUS FOR DETERMINING  
PERFORMANCE-INDICATING NUMBERS  
IN SPORTS GAMES, PARTICULARLY  
IN ICE HOCKEY

COPY

SUPPLEMENTARY DECLARATION

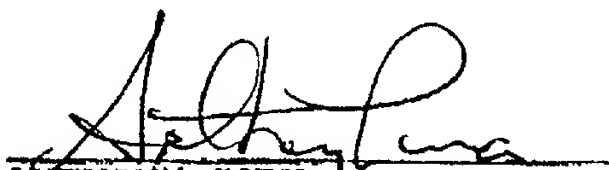
As a supplementary declaration in support of the Amendment filed March 15, 1995, Co-Applicant Anthony Puma states as follows upon information and belief:

No new matter is added in the substitute specification filed on March 15, 1995.

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Dated: March 31, 1995

B:PUMA2:SUPDECTR

  
ANTHONY PUMA

COPY

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Anthony Puma

TITLE: APPARATUS FOR DETERMINING PERFORMANCE-  
INDICATING NUMBERS IN SPORT GAMES,  
PARTICULARLY IN ICE-HOCKEY

PRIOR APPLICATION

SERIAL NUMBER: 08/116,249

ART UNIT: 3304

FILED: September 2, 1993

EXAMINER: J. Harrison

REQUEST FOR CONTINUATION APPLICATION UNDER 37 C.F.R. 1.60

Hon. Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Dear Sir:

This is a request for filing a continuation application under 37 C.F.R. 1.60 of pending prior application Serial Number 08/116,249, filed on September 2, 1993, entitled APPARATUS FOR DETERMINING PERFORMANCE-INDICATING NUMBERS IN SPORT GAMES, PARTICULARLY IN ICE-HOCKEY, which application is a continuation-in-part of application Serial No. 08/579,410 filed September 7, 1990 entitled "Apparatus and Method for Calculating a Comparative Scoring Rating for Teams and Players in a Hockey Game" by the following named inventors:

Erwin Teltscher  
69 Diana's Trail  
Roslyn, NY 11576

Anthony Puma  
38 Kale Road  
Rocky Point, NY 11788

John Mizzi  
30 Cramer Road  
Poughkeepsie, NY 12603

citizens of the United States of America

No abandonment of, or termination of proceedings has occurred in the above entitled prior application. The prior application is not being abandoned.

1. A preliminary amendment will follow.
2. The filing fee is calculated on the basis of the claims existing in the prior application, as amended by the foregoing referenced preliminary amendment:

Total Claims: 20

Independent Claims: 0

The filing fee for the continuation application is \$375.00 for the base filing fee and \$0 for 0 independent claim in excess of three, for a total of \$375.00.

3. Please amend the Specification by inserting before line 1 (after the title of the invention), at page 1, the sentence:

--This application is a continuation of application Serial No. 08/116,249, filed September 2, 1993, which is a continuation-in-part of application Serial No. 07/579,410, filed September 7, 1990.

4. The power of attorney/authorization of agent in the prior application is to:

Alfred M. Walker  
Reg. No. 29,983

5. A true copy of the prior application, including the drawings and declaration, as filed is enclosed. A copy of the Response to Missing Parts, including the signed declaration and small entity statements is also enclosed,

together with the later filed preliminary amendment and substitute specification.

6. A verified statement to establish small entity status under 37 CFR 1.9 and 37 CFR 1.27 was filed in the prior application and such status is still proper and desired.

7. The undersigned states that the enclosed application papers comprise a true copy of the prior application as filed.

Respectfully submitted,

Dated: June , 1996

---

Harvey Lunenfeld  
Reg. No. 26,000

8 Patrician Drive  
E. Northport, New York 11731  
516-754-1000

a:puma2/pat60har

TIME	TEAM A	TEAM B
P E R I O D 1 20 MINUTES		
P E R I O D 2 20 MINUTES		
P E R I O D 3 20 MINUTES		

FIG. 1

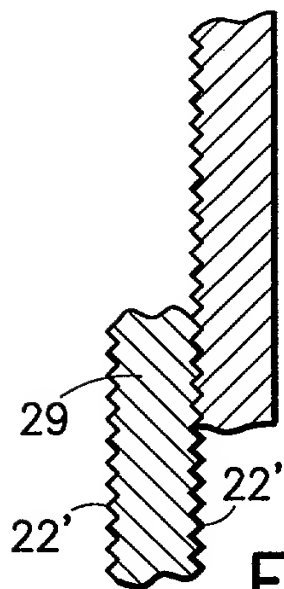


FIG. 2

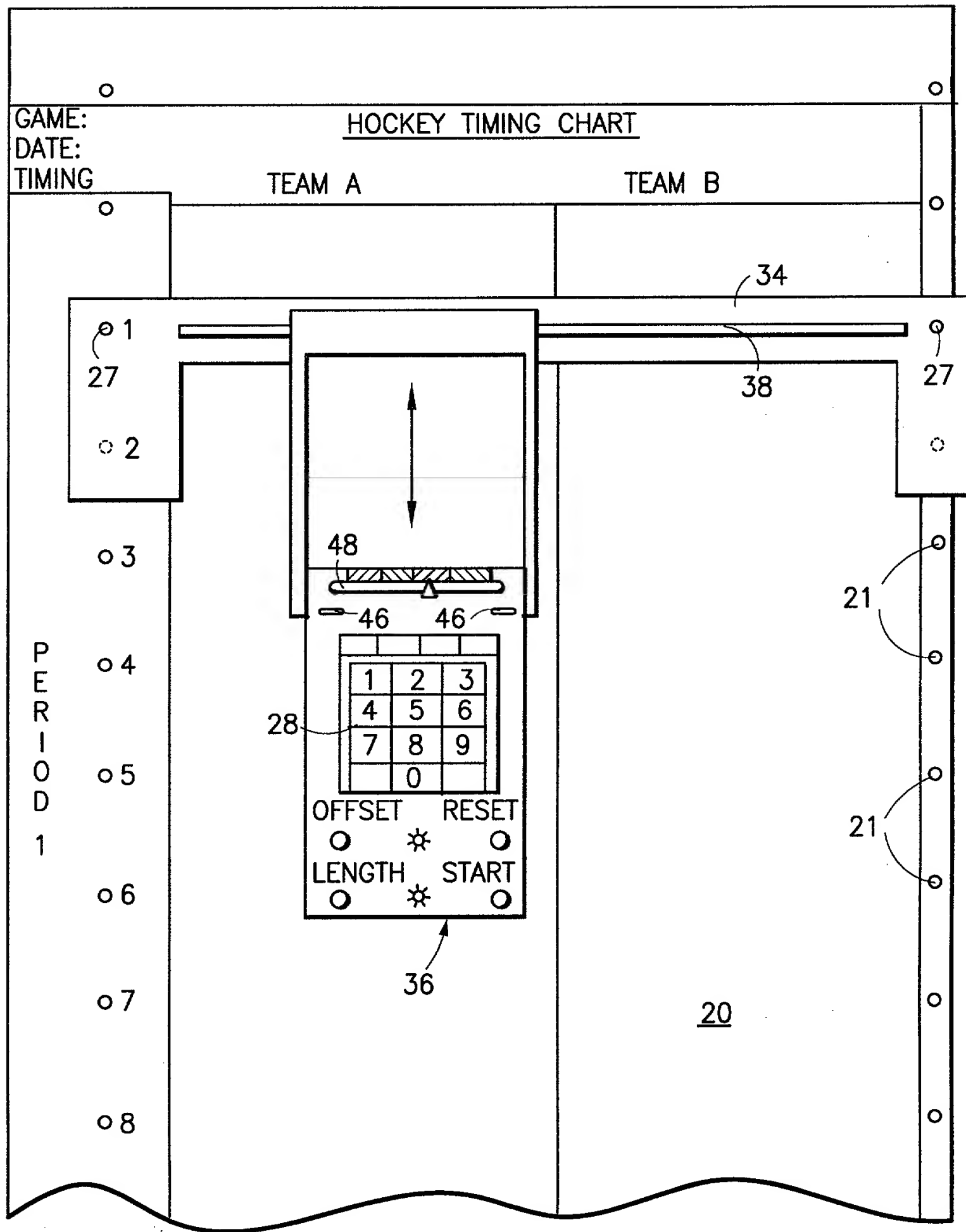


FIG. 3

FIG. 3A

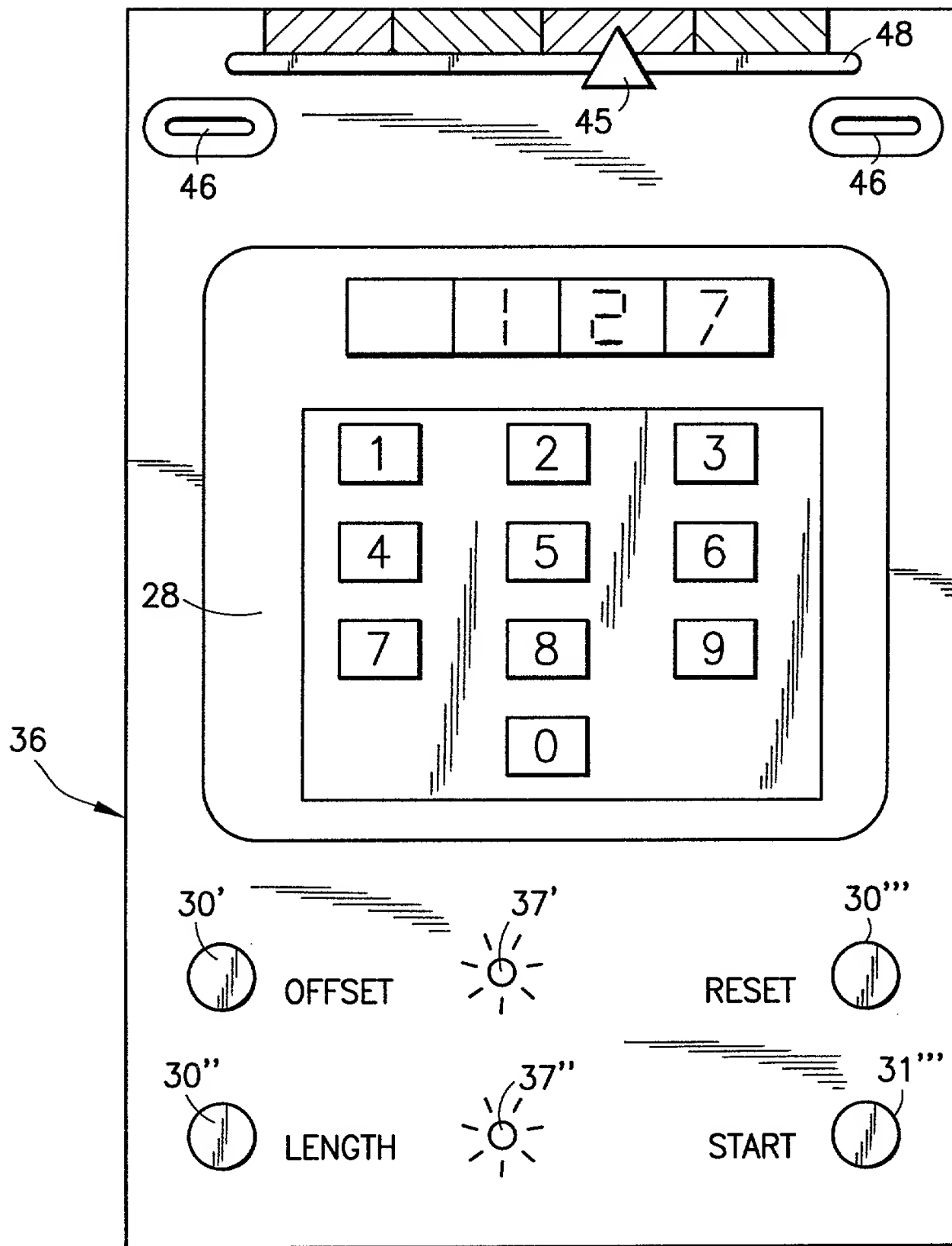


FIG. 4

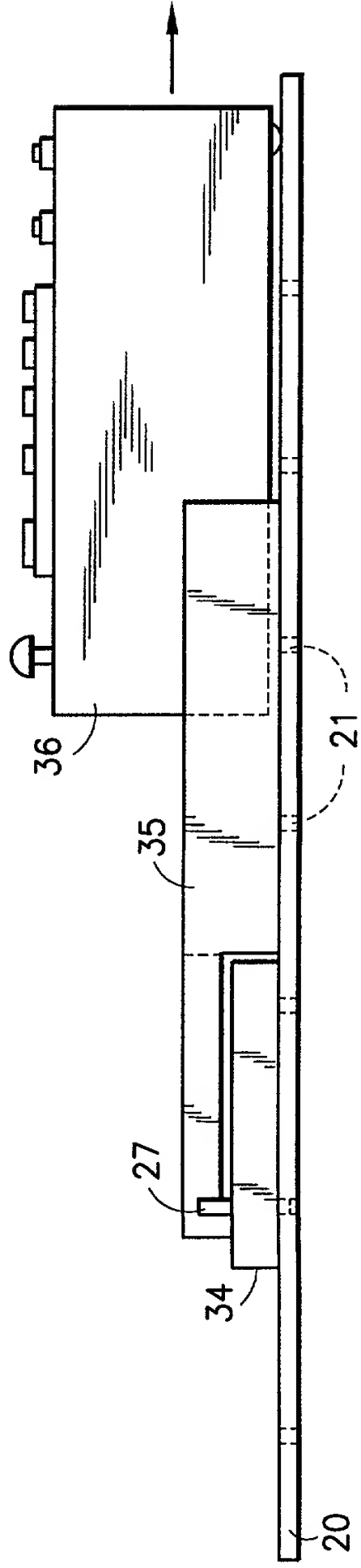




FIG. 5

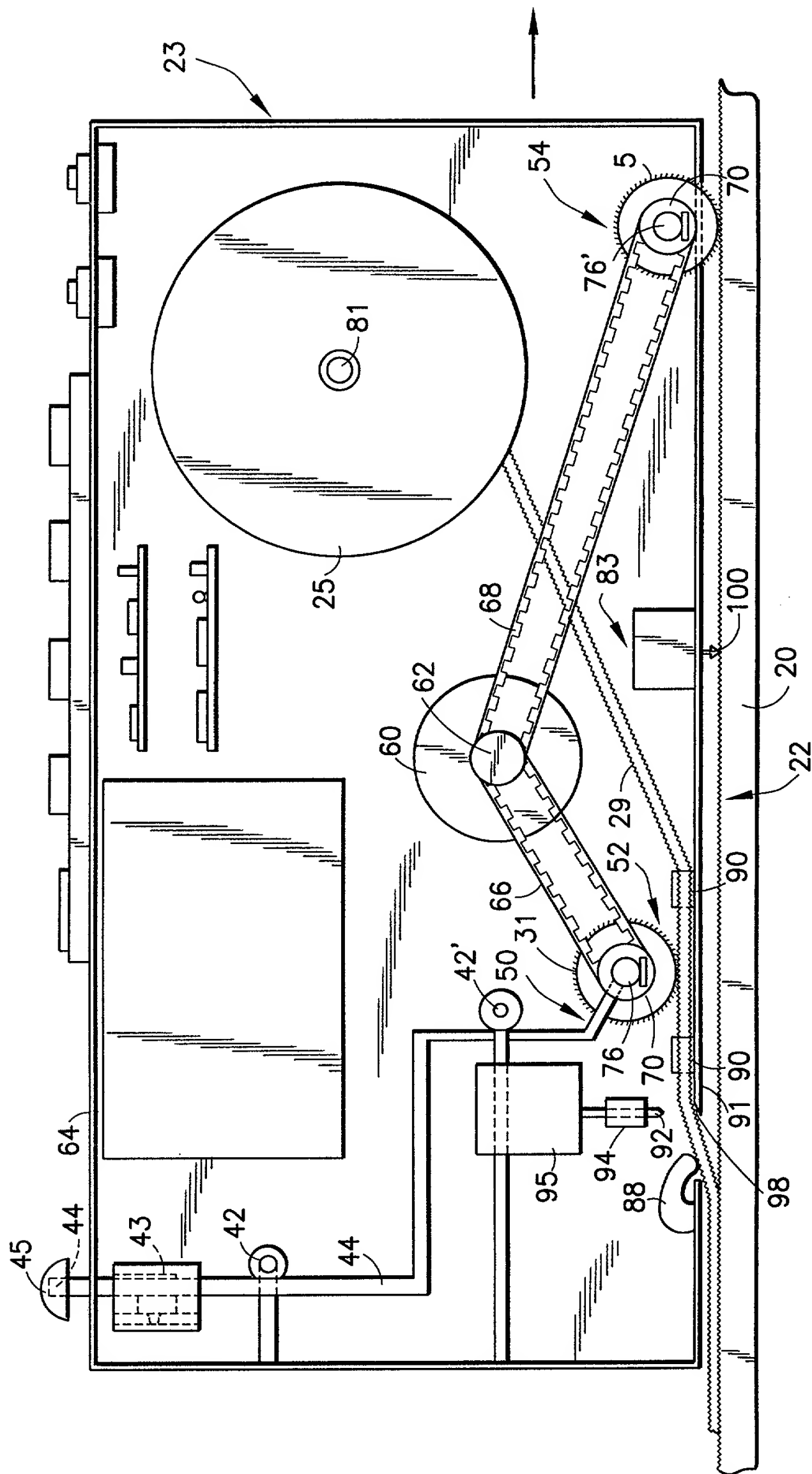
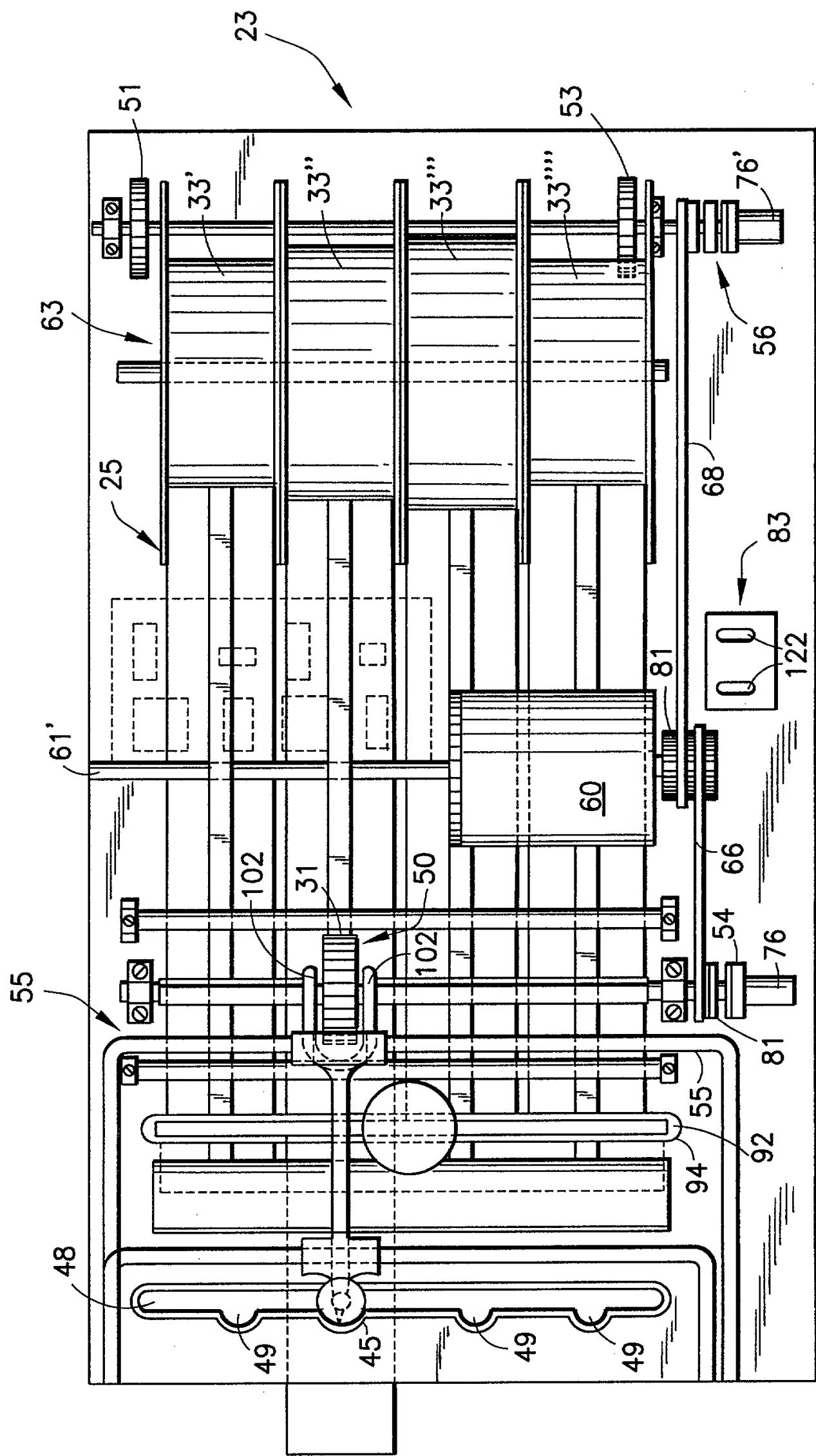


FIG. 6



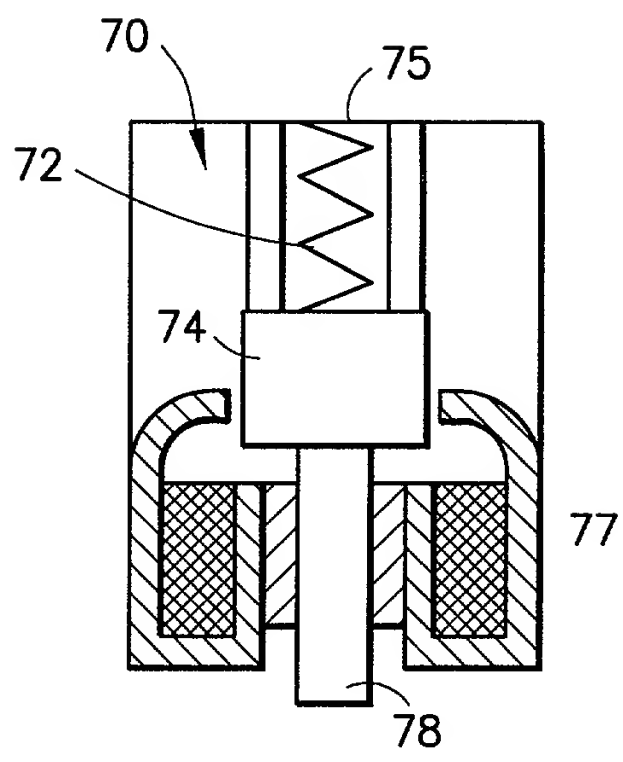


FIG. 6A

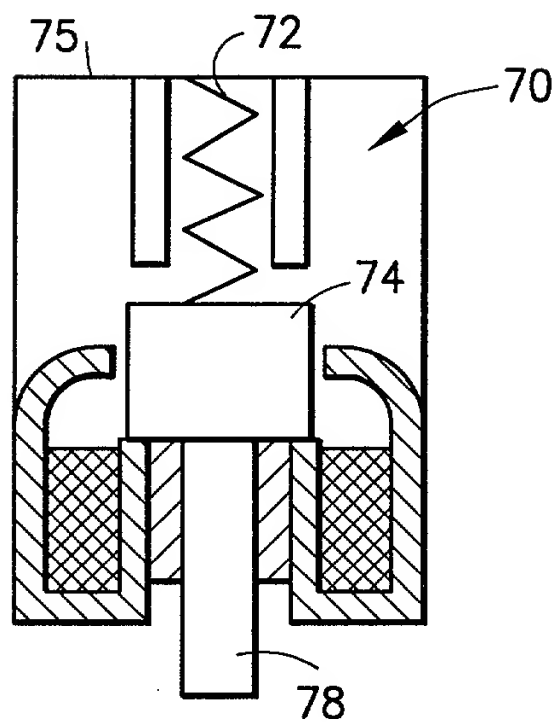


FIG. 6B

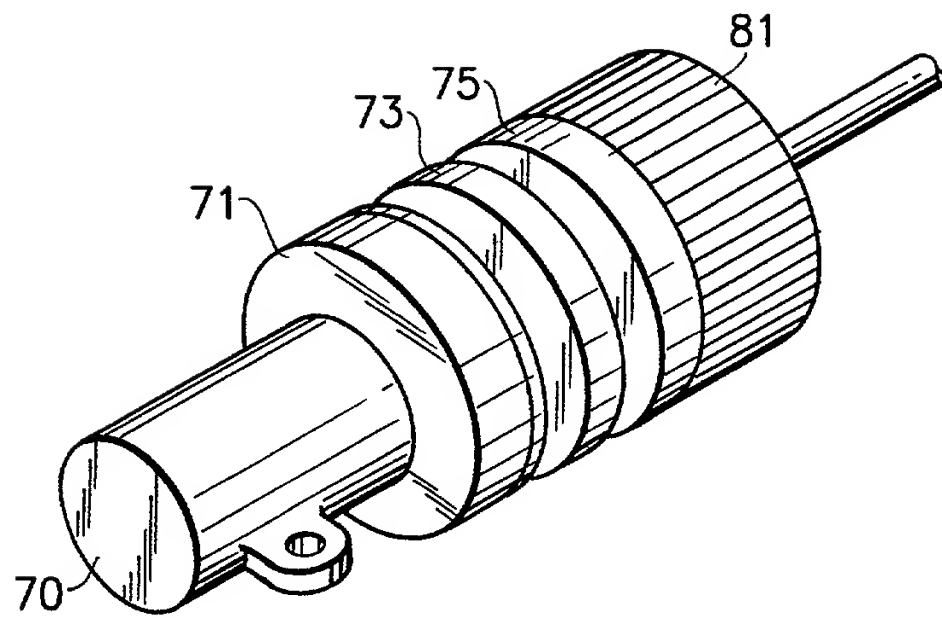


FIG. 7

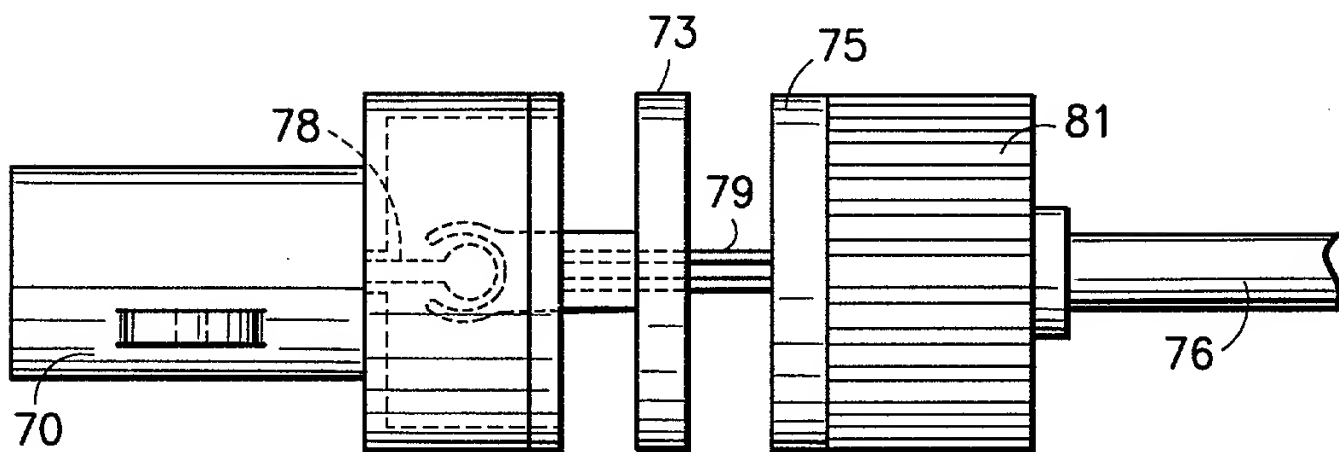


FIG. 8

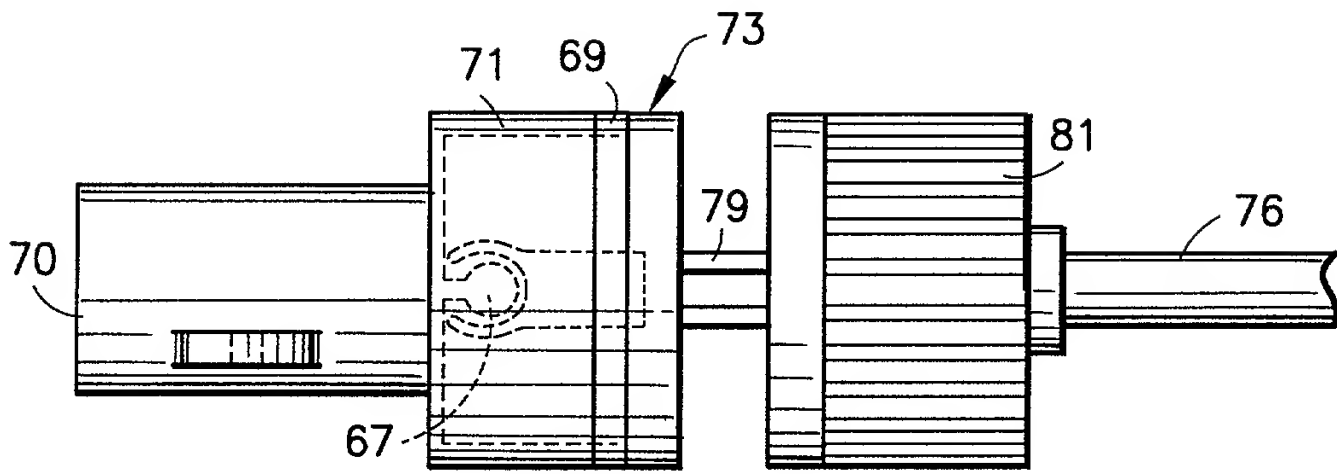


FIG. 9

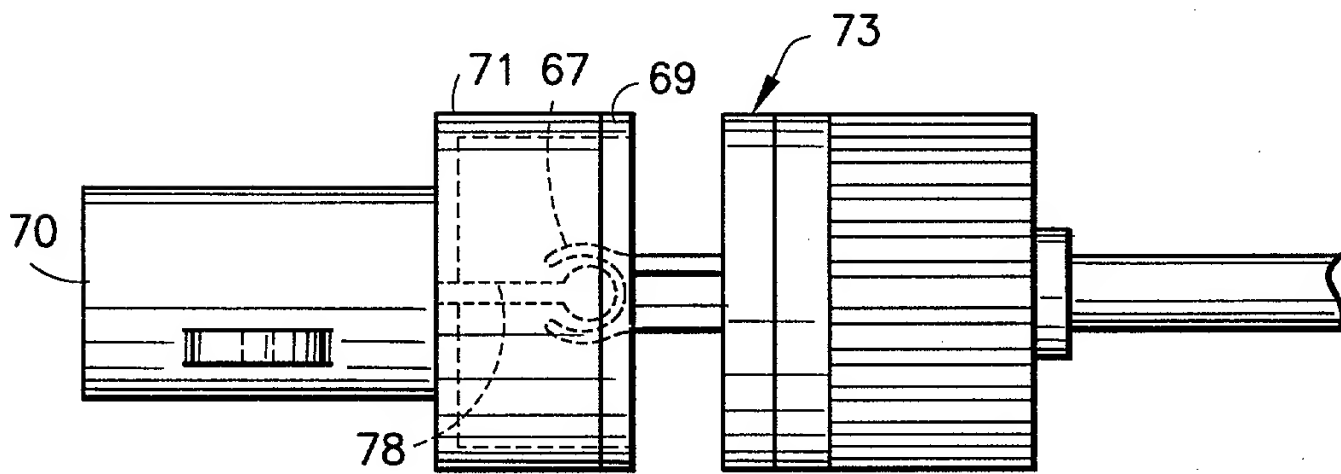


FIG. 10

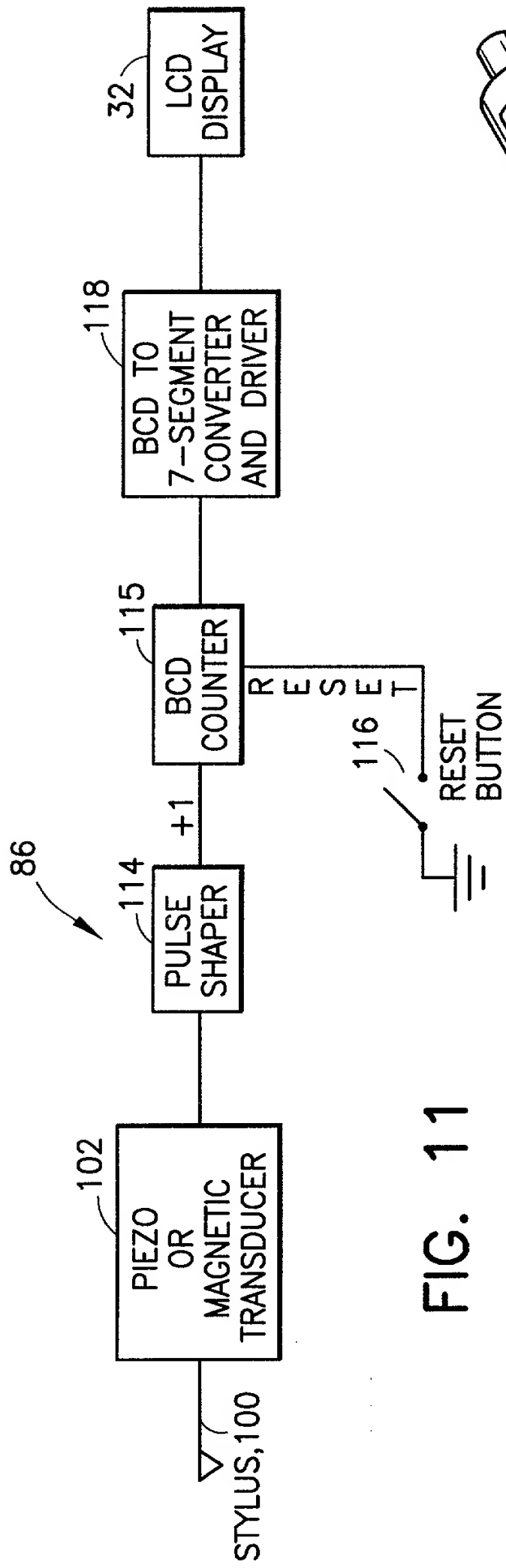


FIG. 11

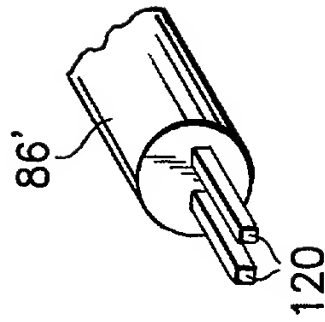


FIG. 12A

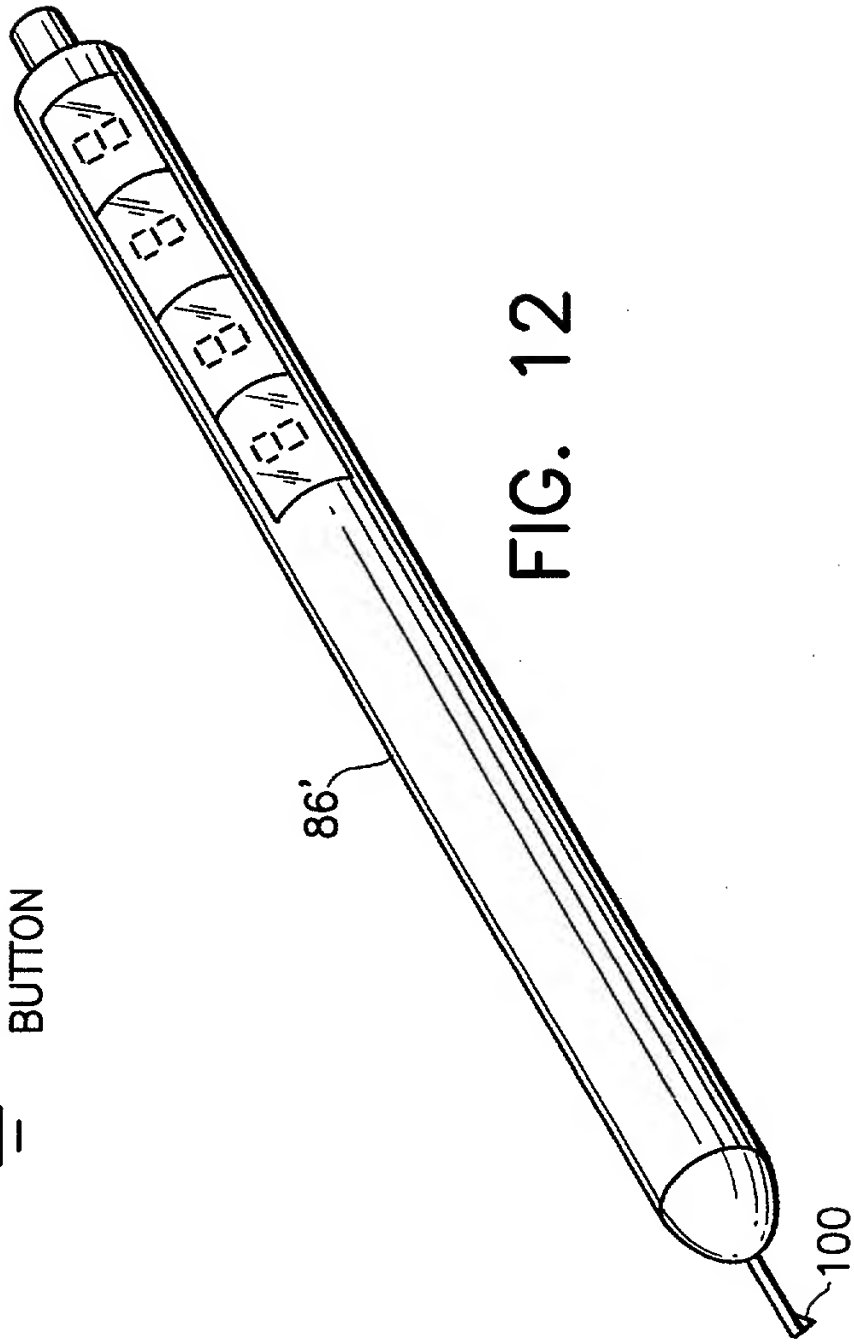
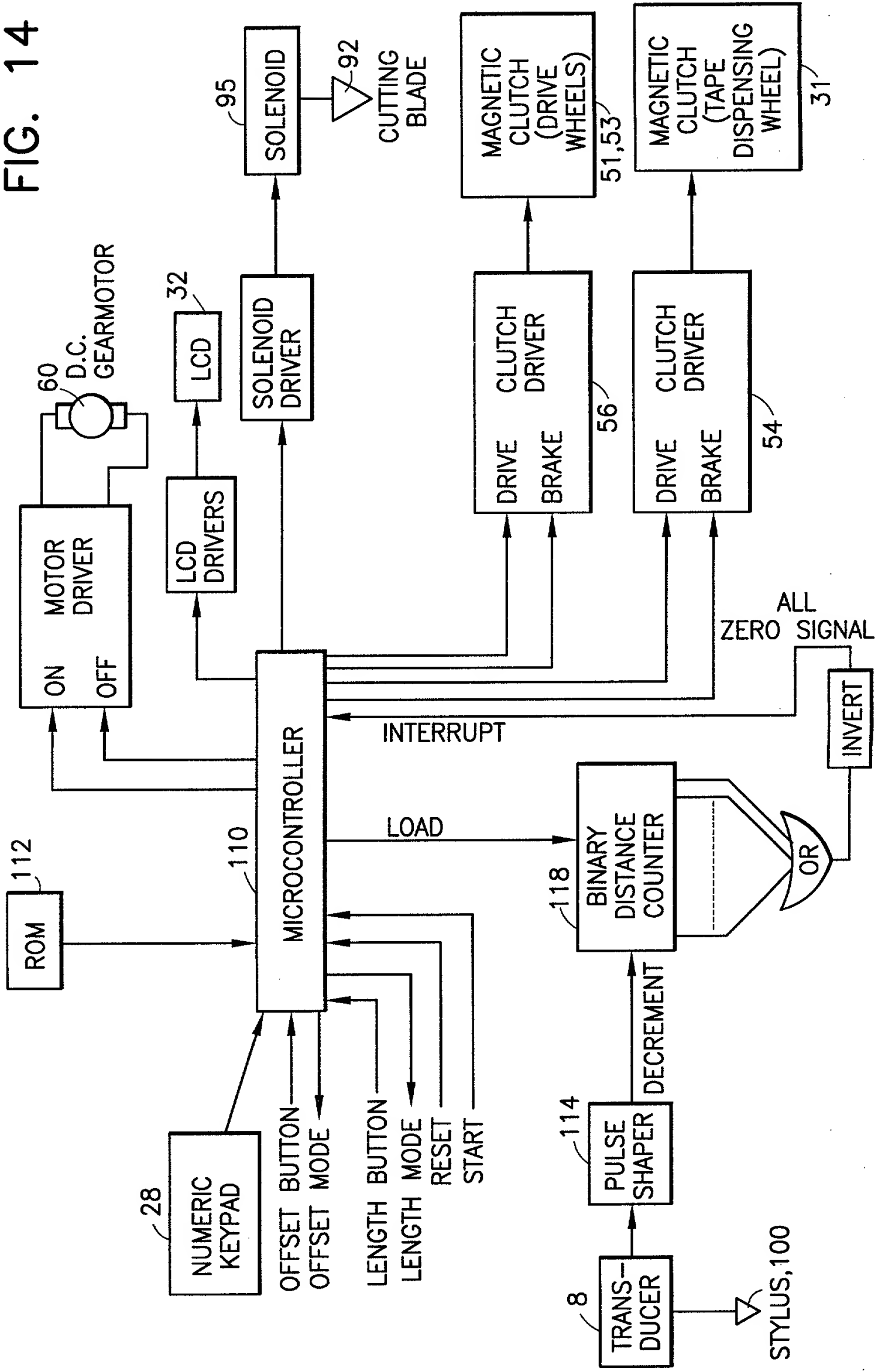


FIG. 12



FIG. 14





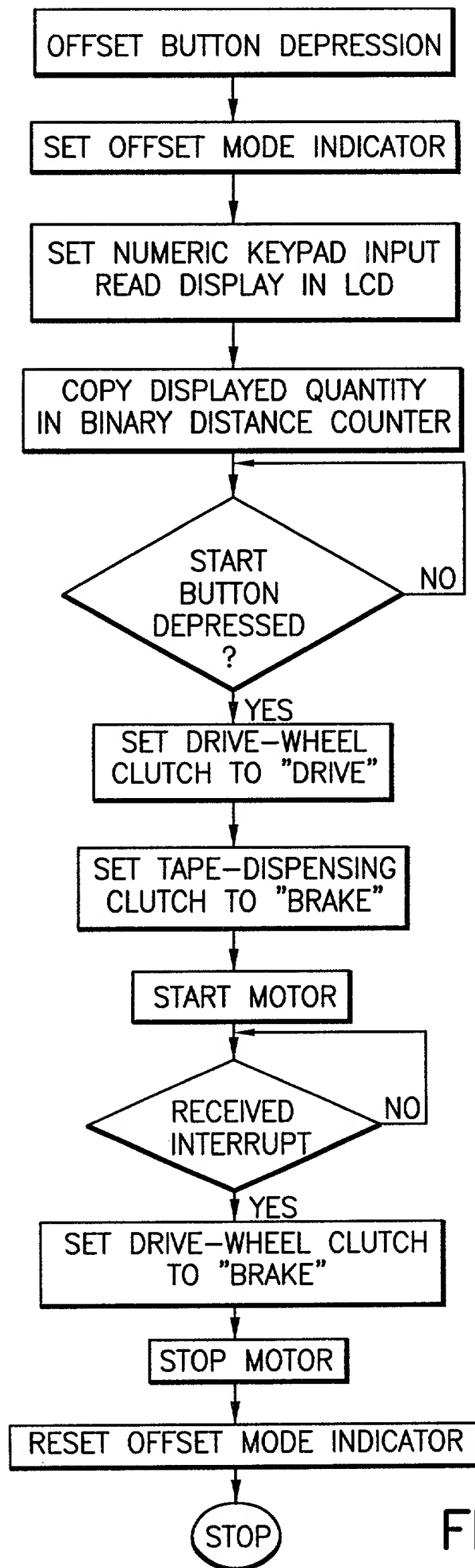


FIG. 15

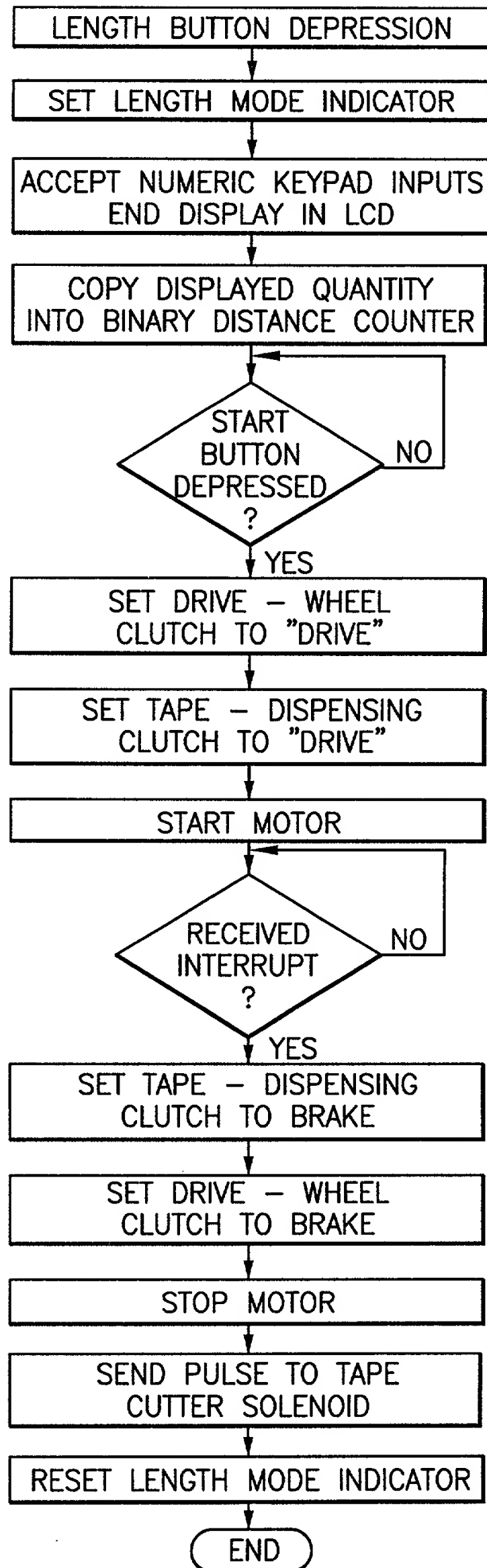
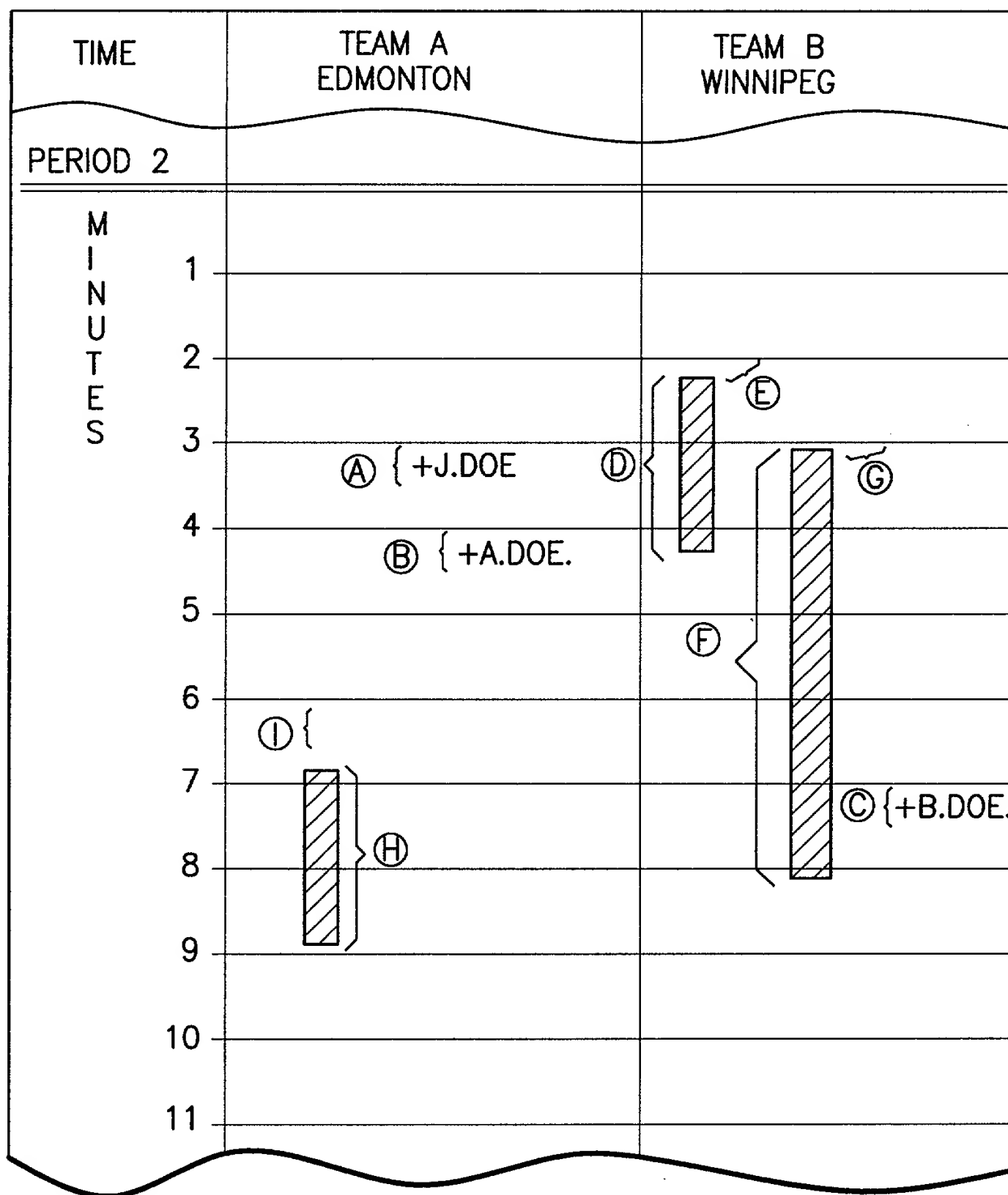


FIG. 16



PORTION OF TIMING CHART — SECOND PERIOD

PORTION OF BOX SCORE (SECOND PERIOD):

- 3. EDM, J.DOE (29) 3:19
- 4. EDM, A.DOE (34) 4:25
- 5. WPG, B.DOE (32) 7:26

PEN — C.DOE, WPG (HOOKING), 2:16  
 D.DOE, WPG (MAJOR), 3:07  
 E.DOE, EDM (ROUGHING), 6:56

FIG. 17

EXAMPLE A

GAME: DATE: TIMING		HOCKEY TIMING CHART	
		TEAM A	TEAM B
MINUTES	0		
	1		
	2		
	3		
	4		
	5		
	6		
	7		
	8		
PERIOD 1	9		
	10		
	11		
PERIOD 2	12		
	13		
	14		
PERIOD 3	15		
	16		
	17		
PERIOD 4	18		
	19		
	20		

Diagram of a hockey timing device. It features a digital display with a 3x3 grid of numbers: 1, 2, 3 in the top row; 4, 5, 6 in the middle row; and 7, 8, 9 in the bottom row. Below the display are four buttons: 'OFFSET' (top left), 'LENGTH' (bottom left), 'RESET' (top right), and 'START' (bottom right). The buttons are represented by circles with internal symbols: a solid circle for OFFSET and LENGTH, a star-like symbol for RESET, and a circle with a dot for START.

FIG. 18

EXAMPLE B

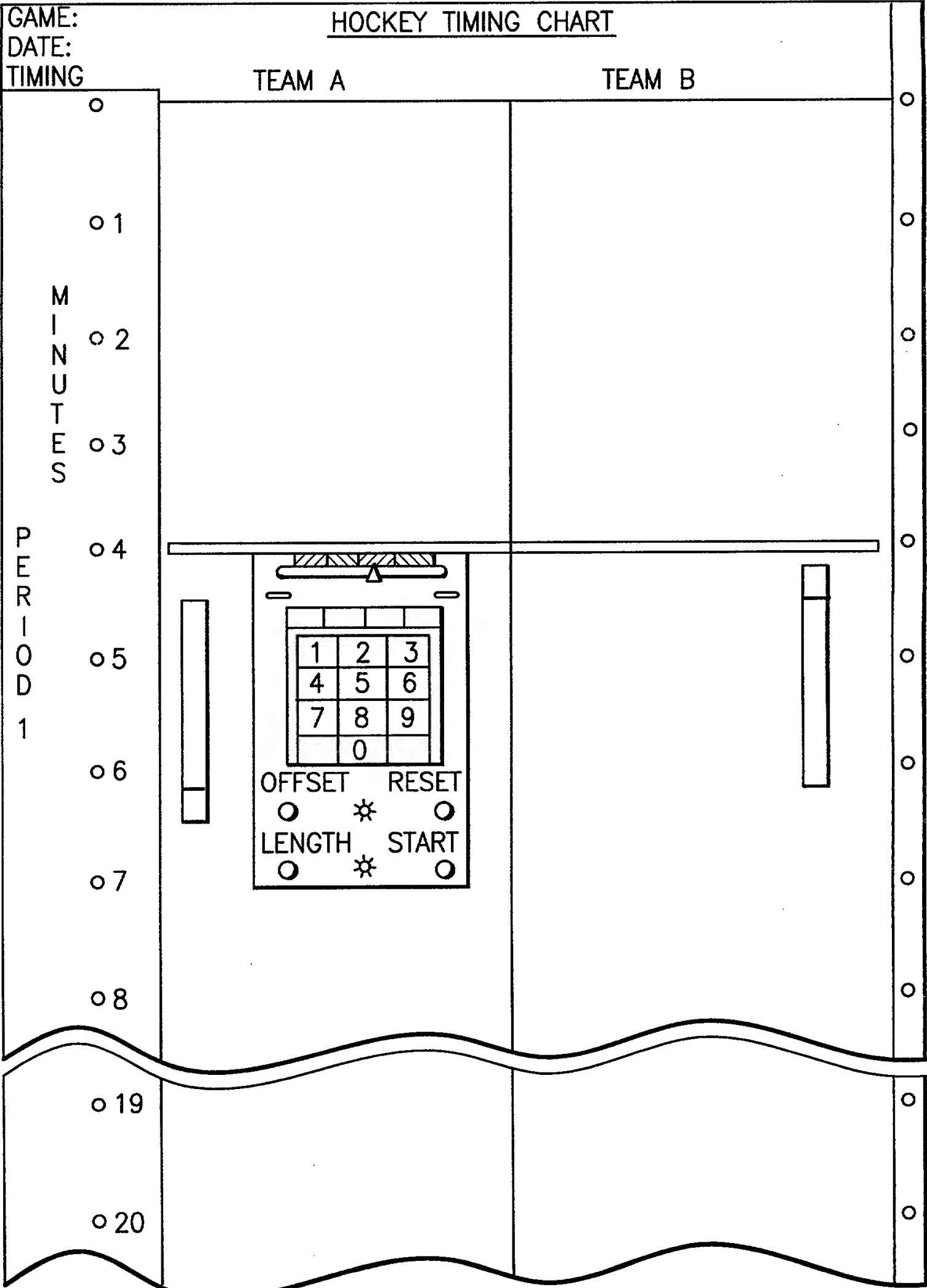


FIG. 18A

EXAMPLE C#1

GAME: DATE: TIMING		<u>HOCKEY TIMING CHART</u>	
		TEAM A	TEAM B
MINUTES	○ 0		
	○ 1		
	○ 2		
	○ 3		
	○ 4		
	○ 5		
	○ 6		
	○ 7		
PERIOD 1	○ 8		
	○ 9		
	○ 10		
PERIOD 2	○ 11		
	○ 12		
	○ 13		
PERIOD 3	○ 14		
	○ 15		
	○ 16		
PERIOD 4	○ 17		
	○ 18		
	○ 19		
PERIOD 5	○ 20		
	○ 21		

1	2	3
4	5	6
7	8	9

OFFSET  
○

RESET  
○

LENGTH  
○

START  
○

FIG. 18B

EXAMPLE C#2

GAME: DATE: TIMING		HOCKEY TIMING CHART	
		TEAM A	TEAM B
PERIOD 1	0		
	1		
	2		
	3		
	4		
	5		
	6		
	7		
	8		
	9		
PERIOD 2	19		
	20		

1	2	3
4	5	6
7	8	9
	0	

OFFSET  
☐

LENGTH  
☐

RESET  
☒

START  
☐

FIG. 18C

EXAMPLE D

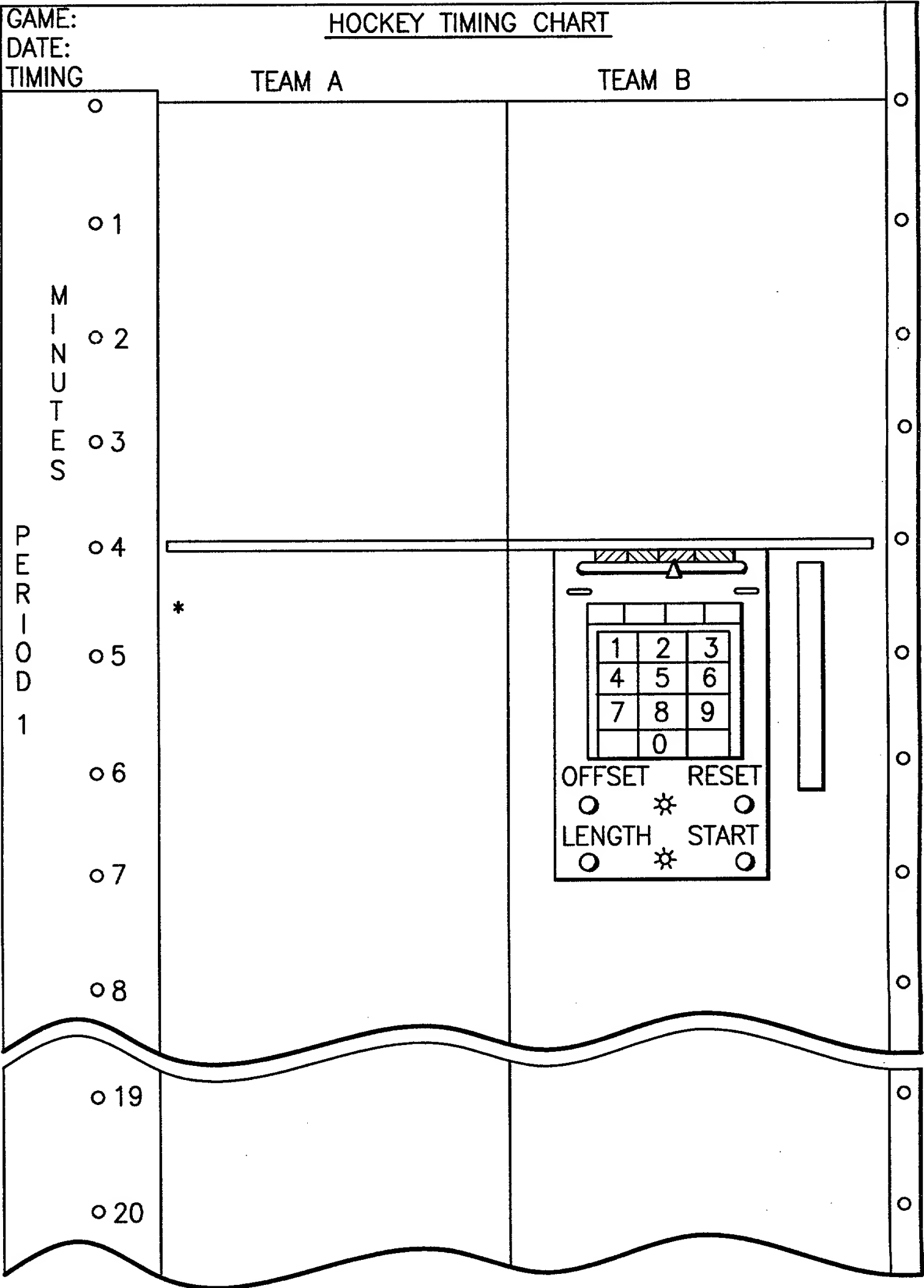


FIG. 18D



EXAMPLE E

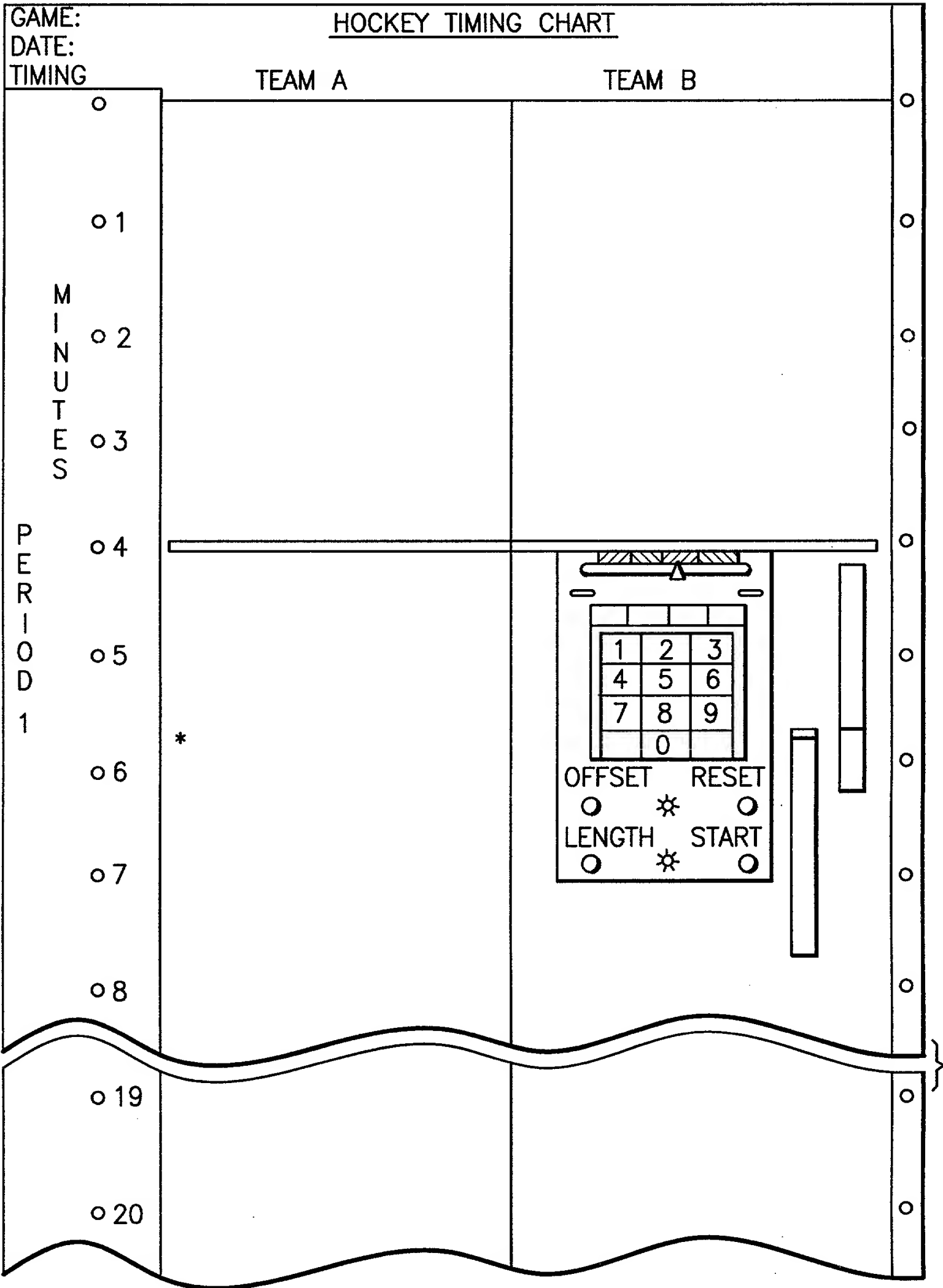


FIG. 18E